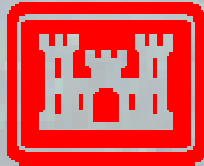


**FINAL**

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**ORDNANCE AND EXPLOSIVES  
LONG TERM MONITORING REPORT FOR THE  
TIERRASANTA COMMUNITY AND THE  
MURPHY CANYON NAVAL HOUSING AREA  
SAN DIEGO, CALIF.**



**US Army Corps  
of Engineers®**

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**November 1999**



**FINAL**

## **EXECUTIVE SUMMARY**

Tierrasanta was the first ordnance removal project completed by the U.S. Army Corps of Engineers. Consequently, this was the first project where Long Term Monitoring (LTM) was performed. The policy document governing LTM was developed simultaneously with the project execution. The draft policy document was staffed with USACE Headquarters, the applicable regulators, and the community to ensure that everybody's concerns were addressed. The Project Manager and several team members traveled to San Diego the week before the field operations to explain to the Tierrasanta Community Council about the project. The council was asked to identify individuals that should be contacted for information pertinent to the LTM effort. The council was very happy that the Corps was verifying the protectiveness of the clearance action.

The project team spent the week of 22 through 26 February conducting field operations. Part of the team surveyed the canyons looking for evidence of erosion, new construction, recreational or other activities, storm damage, or anything else that might expose the public to any ordnance left over from the clearance. After three days of inspecting various areas it was concluded that the clearance conducted by the Corps of Engineers remains protective of the public.

The team contacted various agencies to determine if the institutional controls currently in place were still effective. The team determined that for the most part these controls were still effective. The warning signs erected by the city of San Diego were well maintained. The Tierrasanta Public Library was missing some documents concerning the Former Camp Elliott. The Corps of Engineers will replace these documents. Public education about the potential ordnance danger in the canyons needs to be enhanced in the public school system.

Several meetings between the U.S. Army Corps of Engineers, the State of California, the city of San Diego, and the community of Tierrasanta were held to formulate an action plan and responsibility matrix to ensure that institutional controls remain in place and effective. The city of San Diego and the community of Tierrasanta were very supportive of the project and continue to spearhead the effort to ensure protectiveness of their citizens.

LONG TERM MONITORING REPORT  
FOR  
THE TIERRASANTA COMMUNITY AND  
THE MURPHY CANYON NAVAL HOUSING AREA,  
SAN DIEGO, CALIFORNIA

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LONG TERM MONITORING REPORT  
FOR  
THE TIERRASANTA COMMUNITY AND  
THE MURPHY CANYON NAVAL HOUSING AREA,  
SAN DIEGO, CALIFORNIA

## 1.0 INTRODUCTION.

This report presents the conclusions and recommendations of an historical records search, site investigation for ordnance, and interviews (see list of personnel interviewed at Appendix C), conducted during the period 22 February through 26 February 1999. The investigation was performed under the authority of the Defense Environmental Restoration Program (DERP), and consistent with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The following U.S. Army Corps of Engineers personnel made up the site team:

Mr. Brad McCowan	CEHNC-OE-DC	256-895-1847
Ms. Toni Hamley	CEHNC-OE-CX	256-895-1761
Mr. Jim Walker	CEHNC-OE-S	256-895-1579
Mr. Bill Veith	CEHNC-OE-CX	256-895-1592
Mr. B.J. Allen	CESPL-CO-SS	619-674-6766
Mr. Jerry Russel	CEMVR-ED-DO	309-782-1480
Mr. George Ofslager	CEMVR-ED-DO	309-782-1489

## 1.1 PURPOSE.

This report documents the review of the November 1990 through April 1994 ordnance clearance action at the community of Tierrasanta and the Murphy Canyon Naval Housing Area in San Diego, California. Ordnance response is conducted in general compliance with the principles and concepts in CERCLA. One such principle is the requirement to assure continued effectiveness through review of the selected response action. This review should occur no less often than every five years and is the basis for this report.

“Protectiveness” and “Potential for Harm” are complementary characteristics of an ordnance-contaminated site. Protectiveness is achieved when the potential for harm is reduced or managed. Protectiveness is maximized when potential for harm is minimized, (See Appendix E for protectiveness assessment).

The investigation focused on that portion of former Camp Elliott that is now the community of Tierrasanta and the Murphy Canyon Naval Housing area in northeast San Diego. Homes, schools, and shopping centers are located on the canyon tops (mesas) that spread throughout the community.

## 2.0 CONCLUSIONS.

The 5-years review concluded that the Ordnance and Explosives (OE) Clearance completed in April 1994 is still protective of public safety. No OE problem was found due to erosion, new construction, recreational or other activities, storm damage, or changes in land use. The review also found conditions in the project area have improved since the removal was completed in 1994. The vegetation has grown back with vigor. Dense vegetation provides soil stability and limits human access to portions of the project area. Further, the community has developed some protective actions that add significantly to the protectiveness of the removal action. The city of San Diego was instrumental in the passage of Senate Bill 650 in 1989. This bill requires that renters and buyers of property located within 100 feet of a former military site where ordnance was used be notified of that property's past usage.

Institutional Controls currently in place are effective. However, public outreach by the school system and availability of information for the public need improvements. Also, additional measures should be taken to minimize vandalism in the area. These issues are discussed in Sections 3.0 and 4.0 of this report.

## 3.0 RECOMMENDATIONS.

3.1 **Ordnance Training in schools.** Increase public outreach in the community schools. Recommend ordnance awareness training be conducted in the public schools at least annually. The San Diego Fire Department has given this training in the past. Other Points of Contacts (POC) for training would be the US Army's 710 Ordnance Company, Navy EOD, Marine EOD, or the US Army Corps of Engineers.

3.2 **Public Training – Parents.** Provide public awareness training concerning the potential unexploded ordnance problem to the parents living in the community. This training should focus on the hazards of allowing their children to play (digging a bicycle-jumping course) in the canyons in the Tierrasanta community.

3.3 **Habitat Management Plan.** The city of San Diego should incorporate ordnance concerns into their habitat management plan.

3.4 **Public Information.** The U.S Army Corps of Engineers should update the information available in the local Tierrasanta public library concerning the Former Camp Elliott.

3.5 **Navy Public Housing.** The U. S. Army Corps of Engineers provide one hard copy and 2 CD ROMS of the community information to the Navy for use. Also, provide to the Navy information materials for new arrivals in the Murphy Canyon Housing Complex.

3.6 **Contractors working in the city of San Diego.** The U.S. Army Corps of Engineers assist the city of San Diego in developing a safety briefing advising of the potential ordnance hazards and the precautions to be taken while working in the Tierrasanta community. This briefing will be given to all contractors working in the Tierrasanta community on projects where digging or grading of the site might unearth unexploded ordnance.

3.7 **Contractors working in the Navy Housing area.** The U.S. Army Corps of Engineers assist the Navy in developing a safety briefing advising of the potential ordnance hazards and precautions to be taken while working in the Murphy Canyon Navy Housing Area. This briefing will be given to all contractors working in the Murphy Canyon Navy Housing Area on projects where digging or grading of the site might unearth unexploded ordnance.

3.8 **Report of ordnance activities.** The U.S. Army Corps of Engineers' POC will brief the Tierrasanta Community Council and the San Diego City Manager at least once a year concerning any ordnance activities reported in the area.

3.9 **Establish point of contact.** The U.S. Army Corps of Engineers perform another site investigation after an additional 5-year interval to revalidate the clearance results. The Corps of Engineers will establish a point of contact (POC) that will monitor all of the ordnance-related incidents reported in the community. The POC will periodically check the canyons in the area to see if erosion is becoming a problem. If changes occur, the POC may recommend that the next periodic investigation time frame be reduced.

3.10 **Baseline of erosion.** The U.S Army Corps of Engineers develop a photographic baseline of erosion prone areas, the bike track, and other potential problem areas, (See Appendix F).

3.11 **Monitor vandalism.** The City of San Diego, at least annually, walk the Tierrasanta community area to check the condition of the warning signs, check the condition of the vegetation, and look for any excavation areas.

3.12 **Implementation.** The U.S Army Corps of Engineers, the City of San Diego, and the State of California develop an "Action Plan" to include a "Responsibilities Matrix" to implement the above recommendations.

#### 4.0 RESULTS OF THE SITE INVESTIGATION CONDUCTED BY THE U.S. Army CORPS OF ENGINEERS TEAM 22 FEBRUARY THROUGH 26 FEBRUARY 1999.

##### 4.1 TERRAIN INVESTIGATION.

A team from the U.S. Army Corps of Engineers Huntsville Center traveled to San Diego during the week of the 15<sup>th</sup> of February to inform the Tierrasanta Community Council about the initiative to determine if the ordnance clearance completed in 1994 is still adequate for public safety. Arrangements were made with the different local agencies to meet the following week while the actual fieldwork was in progress. The local community was very appreciative of the effort to ensure their safety.

This portion of the site investigation was to determine if there had been any changes in site conditions that would impact the public safety. Specific site conditions of concern to the site inspection team were new construction, erosion, recreational or other activities, storm damage, and changes in land use. With the exception of a significant increase in vegetation, all areas have remained basically unchanged since completion of the removal action. There has been no new construction in most of the areas. The only major new construction identified since the clearance was the construction of a community pool adjacent to the Tierrasanta Recreation Center. The Tierrasanta area was subjected to heavy rains during 1997 and 1998. Some of the canyon floors showed evidence of heavy water flow. Very few areas of significant soil erosion were discovered during the site inspection. Most areas are well covered with vegetation and are not subject to excessive erosion. In areas where erosion was discovered, the erosion did not extend to the three-foot ordnance removal depth required by the removal action. The worst erosion was in the area next to the youth center just off of Santo Road. A team consisting of Mr. Bill Veith and Mr. B.J. Allen searched this area. The erosion was caused by the drainage of surface water directly into the material next to the parking lot. This material turned out to be filling material probably brought in when the parking lot and park were constructed. Signs warning the public of a possible ordnance presence were located at the entryway into most areas. All but one or two of the signs were in good condition and appeared to have been maintained on a regular basis.

Areas were searched over a three-day period using either a two or four man team. The areas that were searched during the terrain investigation were selected based on the quantities and types of ordnance found in each area during the remediation, and the location of the areas with respect to the public. Priority was given to those areas where the most hazardous types of ordnance items were found. The next criterion was the potential for public exposure to ordnance hazards. The terrain inspection team inspected 19 of the 32 areas based on the above criteria. Due to the almost complete lack of magnetic anomalies and soil erosion in these areas the terrain inspection team determined that further inspection was unnecessary and that the previous remediation effort had been successful. All areas that were not walked and swept with magnetometers were visited and examined for evidence of excessive erosion or changes in land use. The search was limited to a surface sweep only. The magnetometers were used to locate anomalies on surface areas that were covered by high grass or dense vegetation. There were no

ordnance items or ordnance scrap found during the site inspection. No attempt was made to excavate anomalies as this was beyond the scope of the site inspection. Comments on specific areas are indicated below (see map of area at Appendix B).

a. Area F-10E

The west entry into this area was not marked with a warning sign (see photographs 1 & 2, Appendix A). There was a warning sign at about the midpoint of the walking path that runs the length of this area. There is some evidence of flooding in the floor of the canyon (see photographs 3 & 4, Appendix A). The remainder of the area is well covered with vegetation and there is very little erosion in this area (see photographs 10 & 11, Appendix A). Children have built a BMX track for bicycles near the walking path (see photographs 5, 6, 7, & 8, Appendix A). The children have been digging in the soil to create mounds of dirt to jump with their bicycles. This site was checked with magnetometers and no anomalies were found in this location. One subsurface anomaly was found on the canyon wall in the East End of Area F-10E. This completed the inspections of this site. No evidence of OE was found.

b. Area F-7

Very little erosion was noted during the inspection of this area. Warning signs are posted at access points to this area. One of the warning signs located near a walking path was marked with graffiti and was in poor condition (see photographs 12 and 13, Appendix A). The canyon walls in this area are very steep. It looks like heavy vegetation is preventing any erosion in this area. One area behind Vons Supermarket was of concern due to the density of unexploded ordnance (UXO) and ordnance and explosives (OE) scrap recovered during the removal action. One subsurface anomaly was found near the northeast end of Area F-7. No evidence of OE was found.

c. Area F-8E

This area is well covered with vegetation, including a large amount of Poison Oak, and there is very little erosion (see photographs 14 thru 17, Appendix A). There is some evidence of flooding in the floor of the canyon, but erosion was not significant. No evidence of OE was found.

d. Area F-1

The site inspection team entered at the north east corner of the area. Area F-1 is covered with heavy vegetation and passage through some parts is very difficult (see photographs 20 & 21, Appendix A). One area of significant erosion was discovered on the east wall of the canyon (see picture 22, Appendix A). Soil that has been washed from the rim of the canyon has been

deposited on the canyon wall. The wall of the canyon is not being eroded but rather the soil is being washed down from the rim of the canyon. Another team checked the Northwest section. There was major erosion problems near the Murphy Canyon Recreation Center. This appears to be all back-fill. The erosion was visually checked. No evidence of OE was found.

e. Area F-5N

This is a large area that is intersected with a power line road that runs from northeast to southwest. This area had the second highest concentration of ordnance found during the removal action. Vegetation coverage was good in this area and erosion was minimal (see photographs 23 thru 28, Appendix A). There was erosion on the western edge where homeowners have kept the brush cut back as a firebreak. Overall, the area had good vegetation and the erosion was mostly dirt from the rim of the canyon that has washed down. No evidence of OE was found.

f. Area F-6

At approximately ¼ of the way down the canyon floor from the north end of Area F-6 a campsite was discovered (see photograph 32 & 33, Appendix A). The campsite was unoccupied, but it showed signs of recent use. An area of slumping soil was found (see photographs 30 & 31, Appendix A). It was located on the east canyon wall at approximately the midpoint of the area. The soil is soft and spongy in this area and with heavy rain it has the potential for further movement down the hillside. No subsurface anomalies were discovered in Area F-6. No evidence of OE was found.

g. Area F-2W

This area has very little erosion. The rim of the canyon showed signs of erosion but a further inspection of the area indicated that soil from the rim is washing down the canyon wall. Again this is caused by the removal of vegetation near the houses. There were several subsurface anomalies detected near the upper western edge. This is probably construction debris normally found near homes. A lot of construction debris was found near the canyon rims during the ECC clearance. No evidence of OE was found.

h. Areas 11S and 11N

These areas are adjacent to the Military golf course. The vegetation is very thick. There is no erosion problem in these areas. No evidence of OE was found.

i. Area F-10M

Vegetation provided good ground cover in this area and erosion was minimal. No subsurface anomalies were found in this area. Several UXOs were found in this area during the removal action. No ordnance or ordnance related scrap was found during the investigation.

j. Area F-10A

Vegetation provided good ground cover in this area and erosion was minimal. No surface UXOs or ordnance scrap was found in this area. Very few subsurface anomalies were found in Area F-10A. No evidence of OE was found.

k. Area E-1

Vegetation provided good ground cover in this area and erosion was minimal. No subsurface anomalies were found in this area. No evidence of OE was found.

l. Area OA-1, Murphy Canyon Housing Area

This area is adjacent to Interstate 15. There is a very good vegetation cover in the area and no signs of any erosion. No evidence of OE was found.

m. Area OA-2, Murphy Canyon Housing Area

The area has a good vegetation cover and no signs of erosion. The team walked the area located next to the housing complex. No ordnance or ordnance related scrap was found.

n. Area OA-3, Murphy Canyon Housing Area

The area has a good vegetation cover except for a burned area located on the upper rim of the canyon located near family housing. This area might erode if the vegetation does not grow back before the next rainy season. No evidence of OE was found.

o. Area OA-4, Murphy Canyon Housing Area

The area has a good vegetation cover and no signs of erosion. No ordnance or ordnance related scrap was found.

#### 4.2 ORDNANCE RELATED INCIDENTS.

All of the organizations in the area which currently have the capability to respond to ordnance and explosives incidents were contacted to determine if they had responded to any incidents over the past five years. The San Diego Fire Department Metro Arson Strike Team provides ordnance and explosives support to the community of Tierrasanta including Murphy Canyon Housing Area. They responded to one incident during the period. It was an empty 75-mm projectile located in a creek bed near the 10900 block of Portobelo Drive. The Metro Arson Strike Team normally contacts the military Explosive Ordnance Disposal (EOD) units if an item of military ordnance is found. These units were contacted to ensure no incidents had been reported directly to them during the past few years. The Navy EOD Mobile Unit No3 said that no one in the unit had responded to an incident at Murphy Canyon Housing Area for the past five years. The Army's 710<sup>th</sup> EOD Company responded to an incident from the East Elliot Project involving a 37mm High Explosive projectile and a 57mm High Explosive projectile. They had no record of any incidents in the Tierrasanta community.

#### 4.3 PUBLIC EDUCATION.

All of the public schools in the Tierrasanta area were contacted to find out if there was an ordnance and explosives education program ongoing in the school. Mrs. Shoemaker from the Tierrasanta Elementary School said in the past the San Diego Fire Department came to the school with a display board and would tell the children what to do and what not to do if they encountered any ammunition. The City of San Diego produced and distributed to the schools an ordnance safety video to supplement the ordnance training given by the Fire Department. Due to the many demands on the limited available time in the schools, this training had been discontinued.

The other schools said basically the same thing. The San Diego Fire Department provided an ordnance and explosives safety briefing in their school. The ordnance safety video was distributed to the school to supplement the training. Over time, the training had been discontinued. Mr. Eric Stahlaker of the Fire Department was interviewed concerning the ordnance safety training. He said they did provide the training but they stopped doing their presentation about a year after the schools received a video describing the hazards in the area.

Ms. Judith Castiano of the local library was interviewed concerning information available to the community residents about the ordnance contamination in the area. She advised the team that the only information available regarding the project was several bound issues of the Tierra Times newspaper. She said that at one time she had a report on the cleanup but it had disappeared. There are very few requests for this information from the local residents. State law requires that all renters and buyers of property located within 100 feet of a former military site where ordnance was used be notified of that property's usage.



The U.S. Army Corps of Engineers Huntsville Center conducted a survey of the Tierrasanta community residents concerning the potential ordnance hazards located in the area. The results of this survey are at Appendix D to this report.

#### 4.4 INSTITUTIONAL CONTROLS.

The city of San Diego agreed several years ago to place signs warning the residents about the potential to find hazardous ordnance items in the canyon areas around the community of Tierrasanta. Ms. Donna Nordstrom, the Tierrasanta Open Space City Inspector, was contacted concerning the maintenance of the signs. She said in the past that they had a problem with the signs being stolen and sold for recycling. The problem has diminished over the past year in that only a couple of signs have been stolen. The signs are inspected periodically and repaired as necessary. When the brush grows up near and around the signs it is removed to ensure the signs remain visible. The team inspecting the area only saw one or two signs that had been damaged. Ms. Nordstrom was also asked about a plan to deal with reseeding the vegetation in case of a fire. She recommended contacting the District Manager, Mr. Kevin Haupt for more information. He was unavailable during the period the team was in San Diego. After he returned, he contacted Ms. Toni Hamley.

The city of San Diego has a Habitat Management Plan to deal with reseeding the area in case of fire or natural disaster. Various other individuals working for the city of San Diego and the community of Tierrasanta were interviewed. No one knows of a program to inform the local citizens about the potential to find ordnance in the area surrounding the community of Tierrasanta. The Tierra Times publishes articles about the potential ordnance, but that is the only active program to inform the community.

#### 5.0 MURPHY CANYON HOUSING AREA.

The site investigation team checked the Murphy Canyon area on 24 February 1999. Areas OA-1, OA-2, and OA-4 area heavily vegetated and have no erosion problem. Area OA-3 had a burned area near family housing that might erode if the vegetation does not grow back before heavy rains. No ordnance or ordnance related scrap was found in any of the areas adjacent to the Navy housing area. Contractors were observed working in the housing area performing maintenance and erosion control. They were installing a pipeline in the area, which required digging up the yards. The Navy Housing Manager was interviewed concerning the notification of residents and contractors about the potential to find ordnance in the areas surrounding the housing area. New residents are given a notice warning them to stay out of the canyons due to ordnance. She said she would notify the Facilities Engineer and others if necessary to check if the contractors working in the area had received a briefing concerning the ordnance problem.

The San Diego Fire Department Metro Arson Strike Team provides ordnance and explosives support to the Navy housing complex at Murphy Canyon. They have no record of any ordnance incident in the housing area in the last five years. Residents are informed about the potential to find ordnance in the canyons and told whom to call if suspicious items are found.

## 6.0 HISTORICAL BACKGROUND.

Camp Elliott became operational during the World War I period when the United States used it for artillery and machine gun training. The area, which today makes up the community of Tierrasanta, was not used extensively between World War I and World War II. During World War II, the area was used for weapon training and practice with a variety of weapons. The Department of the Navy obtained 30,500 acres for Camp Elliott in 1941 and made it home of the Fleet Marine Force Training Center, West Coast, and the Troop Training Unit, Amphibious Training Command, Pacific Fleet, among other commands. Nearly 90% of all personnel stationed at Camp Elliott were, however, attached to Training Center organizations. Camp Elliott contained three permanent subsidiary camps, four bivouac areas, and forty-one combat or firing ranges.

The site was used for tank and parachute training and infantry, scout, mortar, and sniper schooling until 1944. Weapons used on the ranges included every weapon used by the Marines at the time from 22 caliber rifles to 155mm field artillery pieces, as well as all types of demolitions, mines, and explosives. In 1944, the Marines relocated to Camp Pendleton. The area passed back to Navy control as the Navy Training and Distribution Center, which operated until 1946. The Army had jurisdiction over the land from 1946 to 1947, but the land was not used during that year. The Navy Retraining Command was then established there until 1960.

## 7.0 TRANSITION FROM MILITARY TO CIVILIAN USE.

In 1960, Camp Elliott was closed; 7,710 acres were transferred to Miramar Naval Air Station; and 2,961 acres were transferred to the Air Force. In 1961, the Navy reported 13,277 acres as excess to the General Services Administration for disposal. The property was disposed of through land exchanges, grants, and sales during the 1960s. The City of San Diego, the San Diego Unified School District, developers, and private parties acquired parcels of the land. The land sold to developers included the area now known as Tierrasanta. Since the early 1970s, Tierrasanta has been an active important suburb of San Diego.

## 8.0 ORDNANCE CLEARANCE OPERATIONS CONDUCTED BY THE MILITARY.

### 8.1 CLEARANCE OPERATIONS BEFORE 1980.

Several clearance efforts, conducted by various branches of the U.S. Armed Forces, are recorded for this area. The U.S. Navy accomplished one in 1964. The U.S. Marine Corps conducted a second effort in 1965. The U.S. Army conducted a third clearance in 1973. No information on the first two clearances has been located. The following limited information is available on the 1973 clearance:

- (a) The sweep was conducted from 16 October to 30 November 1973.
- (b) Approximately 800 acres were searched on the western slope of Fortuna Mountain.
- (c) A total of 93 ordnance-related items were found.

### 8.2 CLEARANCE OPERATIONS AFTER 1983.

Two major clearance efforts were conducted after a fatal accident occurred in 1983. Two young boys from the Tierrasanta community were killed when a piece of ordnance (37mm high explosive projectile) they had found exploded.

Investigation of the incident concluded that the boys were playing with the item when it exploded. A third child was injured. Concern for public safety has been a highly sensitive issue since this accident.

Both clearance operations, one in 1984 and the other in 1985, were accomplished by U.S. Navy Explosive Ordnance Disposal Mobile Unit Three (EODMU THREE).

The following information about the 1984 clearance effort was stated in a memorandum from the Commanding Officer, EODMU THREE to the Commander, Explosive Ordnance Disposal Group One (COMEODGRUONE)

- a. A total of 326 acres was searched during this clearance effort. The operation was conducted from 9 January through 27 April 1984 using both Navy and Marine Corps personnel.
- b. Test grids measuring 50 feet by 100 feet were laid out in terrain with slopes varying from 10 degrees in low grassy areas to 40 degrees in heavy brush areas. Heavy brush limited searches to trails and roads.
- c. Search effectiveness probability (SEP) was measured for the first search pass of the visual search effort. The presence of planted items increased workers' motivation. SEP for the first pass was reported as approximately 70%.

- d. A recommendation of this clearance effort was that an ongoing education program for the area residents would be the most important measure in preventing more accidents.

The following paragraphs summarize the 1985 clearance effort, as stated in a memorandum from the Commanding Officer, EODMU THREE to the Commander, EODGRUONE.

- a. Clearance operations began on 15 July 1985 and ended on 26 September 1985. Normally, the ordnance search was conducted using three visual sweep teams and one electronic search team. Personnel from the Navy's Transient Personnel Unit and the Marine Corps' Camp Pendleton aided in the search. Mk 26 Ordnance locators were used for the electronic searches, which were again limited to roads and trails because of heavy brush.
- b. The areas swept were the entire Villa Trinidad/Villa Martinque Canyon area, a greenbelt park, and portions of the wooded perimeter of Admiral Baker Field,
- c. Granada Canyon and open space adjacent to Murphy Canyon Navy Housing. A total of 322.41 acres was swept.
- d. Search effectiveness probability was tested for the visual effort. Team leaders placed expended pieces of ordnance in the area to be searched daily, which motivated the workers to look carefully for ordnance. As a result, the reported SEP for the first pass sweep was 90.11%.
- e. A total of 215 items was recovered. Of this total, 158 items were located visually, 56 were located electronically, and a resident turned in 1. Eight items were live; these were located visually.
- f. The memorandum concluded by stating that ordnance would continue to be found in both the areas that had not been swept and the swept areas as a result of erosion and changing vegetation patterns. The memorandum recommended that the best prevention for future accidents would be a continuing education program on ordnance awareness for the residents of Tierrasanta.

#### 9.0 ORDNANCE CLEARANCE OPERATION CONDUCTED BY ENVIRONMENTAL CHEMICAL CORPORATION.

In late 1990, the United States Army Engineering Division, Huntsville, Alabama issued a contract to Environmental Chemical Corporation (ECC) to perform an ordnance clearance operation on approximately 1,900 acres in the Tierrasanta area of San Diego. The clearance lasted from November 29, 1990 to August 23, 1993. Areas not completed by that time were completed under the Camp Elliott Ordnance Removal Contract, which finished in April 1994.

Previous attempts to clear Tierrasanta of explosive hazards were only partially successful, because large scale brush removal and subsurface magnetic detection was not performed and many pieces of ordnance went undetected.

During this clearance, laborers were hired to remove the extensive brush, which was located in several areas of the project. After the brush was cleared from each grid, crews with magnetometers performed a thorough search of the grid. All surface and subsurface anomalies were removed. A quality control search of the grid was performed by the contractor prior to turning the grid over to the Government for a quality assurance check. The Government safety representative would then perform a quality assurance check of the area prior to acceptance by the Government.

During the operation, UXO technicians located and removed more than 4,803 items of ordnance (3,787 small arms and 1,016 larger munitions), 26,321 pounds of ordnance debris, and 142,253 pounds of trash. A Certificate of Clearance was issued by Environmental Chemical Corporation (ECC) stating that all ordnance and related debris located during clearance operations conducted by ECC during the period November 29, 1990 to May 2, 1994 has been removed from the work site and disposed of in accordance with contract requirements.

FINAL

## **APPENDIX A**

Pictures taken during the Site Investigation



**Entry into Area F-10E from the west**



**Entry into Area F-10E from the west**





**Area of heavy water flow in Area F-10E, facing west**



**Area of heavy water flow in Area F-10E, facing west**





**Dirt ramps built by children for bicycle moto-cross,  
Area F-10-E**



**Dirt ramps built by children for bicycle moto-cross,  
Area F-10-E**



**Dirt ramps built by children for bicycle moto-cross,  
Area F-10-E**



**Dirt ramps built by children for bicycle moto-cross,  
Area F-10-E**





**Drainage ditch on south rim of canyon, Area F-10-E**



**Area F-10-E, facing east**





**Jogging path, Area F-10-E, facing west**



**Warning sign with graffiti, Area F-7**



**Warning sign and walking path, Area F-7**



**Warning sign at north entry into Area F-8E**





**15**

**Heavy vegetation in Area F-8E**



**16**

**Area F-8E, facing north**



**Heavy vegetation in Area F-8E**



**South entry into Area F2W with warning sign**





**Facing north, Area F-2W**



**Northwest entry into Area F-1, facing south**





**Heavy vegetation in Area F-1**



**Area of erosion on west canyon wall, Area F-1**



**Entry into Area F-5N from northeast**



**Minor erosion of road, Area F-5N**





**Heavy vegetation on east wall of canyon, Area F-5N**



**Facing southwest, Area F-5N**



**Area where children were killed in 1983, Area F-5N**



**Southwest entrance to Area F-5N, facing southwest**





**29**

**Facing southwest into area F-6**



**30**

**Areas of slumping soil on southeast canyon wall, Area F-6**





**Areas of slumping soil on southeast canyon wall, Area F-6**



**Campsite, Area F-6**



**Campsite, Area F-6**



**Area F-10M, facing northeast**

## **APPENDIX B**

Map of Tierrasanta Project





FINAL

## **APPENDIX C**

List of different agencies contacted during the Site Investigation

City of San Diego Land Use Planning Office	Mr. Tracey Reid	(619) 235-5220
EOD Mobile Det 3 NAS North Island, CA 92135	Petty Officer Stefons Petty Officer Bennett	(619) 545-0480
Chairman, Community Planning Group Tierrasanta Community Council San Diego, CA	Mr. Jan Whitacre	(619) 556-1549
USDA, NRCS 332 South Juniper Escondido, CA 92025	Jason Jackson	(760) 745-2061 FAX: -3210
San Diego County Sheriff Bomb Squad 5255 Mt. Etna Drive San Diego, CA 92025	Bill Crusine	(619) 467-4579
710 <sup>th</sup> EOD Company San Diego, CA 92166	SGT Clark	(619) 553-8500
Environmental Engineer Naval Station San Diego 3395 Sturtevant St., Suite 6 San Diego, CA 92136	Ms. Theresa Morely	(619) 524-6399
Farb Middle School 4880 La Cuenta Drive San Diego, CA 92124	Georgia Finley, Principal's Secretary	(619) 496-8090
San Diego Fire Department MAST Team San Diego, CA	Eric Stahlnecker	(619) 236-6815
Tierrasanta Elementary School 5450 La Cuenta Drive San Diego, CA 92124	Mrs. Shoemaker, School Secretary	(619) 496-8255
City of San Diego District 7, City Council Office Ms. Judy McCarty San Diego, CA	Ms. Council Aid Leslie Webb	(619) 236-7754 Page Number (619) 232-2237 (ID #6324)
City of San Diego Public Library Tierrasanta Branch 4985 LACuenta San Diego, CA	Ms. Judith Castiano	(619) 236-5800 – Main Branch
City of San Diego City Park and Recreation Dept. San Diego, CA	Ms. Marcia McLatchy's Office	(619) 236-6643
Murphy Canyon Naval Housing Manager	Ms. Toni Ladd	(619) 556-6093
Vice Chairperson , Tierrasanta Community Council San Diego, CA	Ms. Deanna Spehn	(619) 236-7039
Vice Chairperson - Planning Tierrasanta Community Council San Diego, CA	Mr. Fred Zuckerman	(619) 565-4472

De Portola Middle School 11010 Clairemont Mesa Boulevard San Diego, CA 92124	Mr. Serritella, Vice Principal	(619) 496-8080
Miller Elementary School 4343 Shield San Diego, CA 92124	Susy Thomas	(619) 496-8319
Ms. Donna Nordstrom Open Space City Inspector Tierrasanta Maintenance District Park and Recreation Department San Diego, CA	Ms. Donna Nordstrom	(619) 685-1354
Serra High School 5156 Santo Road San Diego, CA 92124	Dr. Laserik Saunders	(619) 496-8442
San Diego City Schools Office of the Superintendent Education Center 4100 Normal Street San Diego, CA 92103	Dr. Terry Smith Ms. Karen Heinrich (Dr. Bersin's secretary)	(619) 293-8441 (619) 293-8418

FINAL

**APPENDIX D**

Copy of Survey and Survey Results

# TIERRASANTA SURVEY SUMMARY

**Survey Totals** Totals for each of the survey questions are summarized on the Survey totals sheet (Appendix D). Individual responses from each survey are also provided (Appendix D).

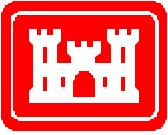
## SURVEY COMMENTS

**School Education** The greatest number of comments requested that educational programs be continued in the schools, or that they were not aware there were programs in the school, but felt they should be implemented. The Corps recommends that ordnance awareness training be continued in schools. (SECTION 3.1).

**New Residents** The second greatest number of comments concerned new residents. These responders indicated that they had lived in the area for a long time, but were concerned that new residents were not aware of the potential for ordnance in the area. Some suggested that a flier be included in the welcome packages many received when they moved in. Some suggested notifications through real estate transactions. The Corps recommends that a brochure be provided to new residents through the Murphy Canyon Naval Housing Office and the Tierrasanta Community Association (SECTION 3.2, 3.4, 3.5, 3.6, 3.7).

**Erosion** Many survey responders expressed concern about erosion. The Corps recommends that the city of San Diego include ordnance concerns into their habitat management plan. (SECTION 3.3).

**Monitoring** Some survey responders indicated in their comments the need to maintain warning signs and for the Corps to continue monitoring of the area. The Corps recommends that warning signs be checked annually, the community and city be briefed about ordnance activities in the area annually, and another evaluation be performed in five years to ensure previous efforts remain protective of the public (SECTION 3.8, 3.9, 3.11).



US Army Corps of Engineers  
Engineering and Support Center,  
Huntsville  
PO Box 1600  
Huntsville AL 35807-4301

### Survey / Questionnaire Report Summary

1) Were you aware that property comprising the Tierrasanta / Murphy Canyon Naval Housing area was once used by the Department of Defense, and is now considered a Formerly Used Defense Site?

	Yes	No	Total
Responses	925	106	1031
	90%	10%	

2) Did you know that the U.S. Army Corps of Engineers conducted an ordnance investigation and cleanup of the area from 1987 until 1994?

	Yes	No	Total
Responses	888	142	1030
	86%	14%	

3) Have you or your family members encountered signs, educational material or any type of information warning of the potential presence and danger of ordnance in the area?

	Yes	No	Total
Responses	909	122	1031
	88%	12%	

4) Suspicious items that may be ordnance should NEVER be touched or disturbed. Do you know whom to call if you or a family member discovers a suspicious item?

	Yes	No	Total
Responses	652	369	1021
	64%	36%	

5) Do you feel additional protective measures need to be taken by the Army to ensure the community is aware of the potential presence of ordnance? What measures do you think would be beneficial?

	Yes	No	Total
Responses	434	533	967
	45%	55%	

PAO Tierrasanta/Murphy Canyon OE Awareness Survey

Ques #	Q1	Q2	Q3	Q4	Q5	Comment
1	Y 1	N 1	Y 1	Y 1	N 1	
2	Y 1	Y 1	Y 1	Y 1	Y 1	
3	Y 1	Y 1	Y 1	N 1	Y 1	
4	Y 1	Y 1	Y 1	Y 1	N 1	
5	Y 1	Y 1	Y 1	Y 1	N 1	
6	Y 1	Y 1	Y 1	Y 1	Y 1	
7	Y 1	Y 1	Y 1	Y 1	N 1	
8	Y 1	Y 1	Y 1	Y 1	N 1	
9	Y 1	Y 1	Y 1	Y 1	N 1	
10	N 1	N 1	N 1	Y 1	N 1	
11	Y 1	Y 1	Y 1	Y 1	N 1	
12	Y 1	Y 1	Y 1	Y 1	Y 1	
13	Y 1	Y 1	Y 1	N 1	N 1	
14	Y 1	Y 1	Y 1	Y 1	N 1	
15	N 1	Y 1	Y 1	N 1	Y 1	
16	Y 1	Y 1	Y 1	Y 1	N 1	
17	Y 1	Y 1	Y 1	Y 1	N 1	
18	Y 1	Y 1	Y 1	Y 1	N 1	
19	N 1	Y 1	Y 1	Y 1	N 1	
20	Y 1	Y 1	Y 1	Y 1	N 1	
21	Y 1	Y 1	Y 1	Y 1	N 1	
22	Y 1	Y 1	Y 1	Y 1	N 1	
23	Y 1	Y 1	Y 1	Y 1	N 1	
24	N 1	N 1	N 1	N 1	Y 1	#4. Police
25	Y 1	Y 1	Y 1	N 1	N 1	
26	Y 1	Y 1	Y 1	N 1	N 1	
27	Y 1	Y 1	Y 1	Y 1	Y 1	#1. I was not aware when I moved here in 1982. Our local news "Tierra Times" has done a fine job of keeping our community updated. #5. I would like to see periodical emphasis on the problem so the community does not become careless of the potential danger.
28	N 1	Y 1	Y 1	N 1	N 1	
29	Y 1	Y 1	Y 1	Y 1	N 1	
30	Y 1	Y 1	Y 1	N 1	N 1	
31	Y 1	Y 1	Y 1	Y 1	?	
32	Y 1	N 1	Y 1	Y 1	Y 1	
33	Y 1	Y 1	Y 1	Y 1	N 1	
34	Y 1	Y 1	Y 1	Y 1	N 1	
35	Y 1	Y 1	Y 1	Y 1	N 1	
36	Y 1	Y 1	Y 1	Y 1	N 1	
37	Y 1	Y 1	Y 1	Y 1	N 1	
38	Y 1	Y 1	Y 1	N 1	N 1	
39	Y 1	Y 1	Y 1	Y 1	N 1	
40	Y 1	Y 1	Y 1	N 1	N 1	#4. But it would be easy to find out who to call for ordnance findings when needed.
41	Y 1	Y 1	Y 1	Y 1	N 1	
42	Y 1	Y 1	Y 1	N 1		
43	Y 1	Y 1	Y 1	N 1	N 1	



PAO Tierrasanta/Murphy Canyon OE Awareness Survey

44	Y	1	Y	1	Y	1	N	1	N	1
45	Y	1	Y	1	Y	1	Y	1	N	1
46	Y	1	Y	1	Y	1	Y	1	N	1
47	Y	1	Y	1	Y	1	Y	1	N	1
48	Y	1	Y	1	Y	1	Y	1	Y	1
49	Y	1	Y	1	Y	1	Y	1	N	1
50	Y	1	Y	1	Y	1	Y	1	N	1
51	Y	1	Y	1	Y	1	N	1	N	1
52	Y	1	Y	1	Y	1	N	1	N	1
53	N	1	N	1	Y	1	Y	1	Y	1
54	Y	1	Y	1	Y	1	Y	1	N	1
55	N	1	N	1	Y	1	Y	1	N	1
56	N	1	Y	1	Y	1	N	1	N	1
57	Y	1	Y	1	Y	1	Y	1	Y	1
58	Y	1	Y	1	Y	1	N	1	N	1
59	Y	1	Y	1	Y	1	Y	1	N	1
60	Y	1	Y	1	Y	1	Y	1	N	1
61	Y	1	Y	1	Y	1	Y	1	N	1 #4. 911
62	Y	1	Y	1	Y	1	N	1	Y	1
63	Y	1	N	1	Y	1	Y	1	N	1
64	Y	1	Y	1	Y	1	Y	1	N	1
65	Y	1	Y	1	Y	1	Y	1	N	1
66	Y	1	Y	1	Y	1	Y	1	N	1
67	Y	1	Y	1	Y	1	N	1	Y	1
68	Y	1	Y	1	Y	1	Y	1	N	1
69	Y	1	Y	1	Y	1	N	1	N	1
70	Y	1	Y	1	Y	1	Y	1	N	1
71	Y	1	Y	1	Y	1	Y	1	Y	1
72	Y	1	Y	1	Y	1	Y	1	N	1
73	Y	1	Y	1	Y	1	Y	1	N	1
74	Y	1	Y	1	Y	1	Y	1	N	1
75	Y	1	Y	1	Y	1	Y	1	N	1
76	Y	1	Y	1	Y	1	Y	1	N	1
77	N	1	N	1	N	1	N	1	Y	1
78	Y	1	Y	1	Y	1	N	1	N	1
79	Y	1	Y	1	Y	1	N	1		#5. Uncertain X Not affected personally.
80	Y	1	Y	1	Y	1	Y	1	Y	1
81	Y	1	Y	1	Y	1	Y	1	N	1
82	Y	1	Y	1	Y	1	Y	1	N	1 #4. I can read the sign.
83	Y	1	Y	1	Y	1	Y	1	Y	1
84	Y	1	Y	1	Y	1	Y	1	N	1
85	Y	1	Y	1	Y	1	Y	1	N	1
86	Y	1	Y	1	Y	1	Y	1	N	1
87	N	1	N	1	N	1	Y	1	?	
88	Y	1	Y	1	Y	1	Y	1	Y	1
89	Y	1	Y	1	Y	1	Y	1	N	1
90	Y	1	Y	1	Y	1	Y	1	N	1
91	Y	1	Y	1	Y	1	N	1	N	1
92	Y	1	Y	1	Y	1	?		?	
93	Y	1	Y	1	Y	1	Y	1	N	1
94	Y	1	Y	1	Y	1	Y	1	Y	1

PAO Tierrasanta/Murphy Canyon OE Awareness Survey

95	Y	1	Y	1	Y	1	Y	1	N	1	
96	Y	1	Y	1	Y	1	Y	1	N	1	
97	Y	1	Y	1	N	1	N	1	N	1	
98	Y	1	Y	1	Y	1	N	1	N	1	
99	Y	1	Y	1	Y	1	Y	1	N	1	
100	Y	1	Y	1	Y	1	N	1			#4 What's the phone number of the people to call for ordnance findings?
101	N	1	Y	1	Y	1	N	1	N	1	#4. I'd read the signs.
102	Y	1	N	1	Y	1	Y	1	N	1	
103	Y	1	Y	1	Y	1	N	1	N	1	
104	Y	1	Y	1	Y	1	Y	1	N	1	
105	Y	1	Y	1	Y	1	N	1	Y	1	New families moving into the community should be aware of the potential presence and danger in this area.
106	Y	1	Y	1	Y	1	Y	1	N	1	
107	Y	1	Y	1	Y	1	Y	1	N	1	
108	Y	1	Y	1	Y	1	Y	1	N	1	
109	Y	1	Y	1	Y	1	Y	1	N	1	
110	Y	1	Y	1	Y	1	N	1	N	1	
111	Y	1	Y	1	Y	1	Y	1	N	1	
112	Y	1	Y	1	Y	1	Y	1	N	1	
113	Y	1	Y	1	Y	1	N	1	N	1	
114	Y	1	Y	1	Y	1	N	1	N	1	#4. No, but I can look at the signs for information pertaining to the discovery of ordnance.
115	Y	1	Y	1	Y	1	Y	1	N	1	
116	Y	1	Y	1	Y	1	Y	1	N	1	
117	Y	1	Y	1	Y	1	Y	1	N	1	
118	Y	1	Y	1	Y	1	Y	1	N	1	I have been a part-time resident of Tierrasanta for over 23 years. A degree in Ordnance Engineering for USPG School and graduate of FT. Leavenworth C&GS College. The U.S. Army Corps of Engineers has done an outstanding job of clearing the canyons of Tierrasanta. I would be pleased to have the sub-contract for this project. 100% removal cannot be obtained. Move on to more important Corps of Engineer projects.
119	N	1	N	1	N	1	Y	1	N	1	#4. EOD/Police Dept.
120	Y	1	Y	1	Y	1	Y	1	N	1	
121	N	1	N	1	Y	1	Y	1	N	1	
122	Y	1	Y	1	Y	1	Y	1	N	1	
123	Y	1	Y	1	Y	1	Y	1	N	1	
124	Y	1	Y	1	Y	1	Y	1	N	1	
125	Y	1	Y	1	Y	1	N	1	Y	1	
126	Y	1	Y	1	Y	1	Y	1	N	1	
127	Y	1	Y	1	Y	1	N	1	N	1	
128	Y	1	N	1	Y	1	N	1	Y	1	
129	Y	1	Y	1	Y	1	Y	1	N	1	
130	Y	1	Y	1	Y	1	N	1	N	1	
131	N	1	Y	1	Y	1	Y	1	N	1	
132	Y	1	Y	1	Y	1			N	1	#4. Police?
133	Y	1	Y	1	Y	1	Y	1	N	1	

PAO Tierrasanta/Murphy Canyon OE Awareness Survey

134	N	1	N	1	Y	1	Y	1		#5. Uncertain
135	Y	1	N	1	Y	1	N	1	N	1
136	Y	1	Y	1	Y	1	Y	1	Y	1
										#3. My son found a shell, called the police, and they took it away!
137	Y	1	Y	1	Y	1	Y	1	N	1
138	N	1	N	1	N	1	N	1	Y	1
139	Y	1	Y	1	Y	1	Y	1	N	1
140	Y	1	Y	1	Y	1	N	1	N	1
141	N	1	Y	1	Y	1	N	1	Y	1
142	Y	1	Y	1	Y	1	N	1	Y	1
										Signs @ all canyon entrances.
143	Y	1	Y	1	Y	1	Y	1	N	1
144	Y	1	Y	1	Y	1	N	1	N	1
145	Y	1	Y	1	Y	1	N	1	N	1
146	Y	1	N	1	N	1	N	1	Y	1
147	Y	1	Y	1	Y	1	Y	1	N	1
148	Y	1	Y	1	Y	1	Y	1	N	1
149	Y	1	Y	1	Y	1	Y	1	N	1
150	Y	1	Y	1	Y	1	Y	1	N	1
151	Y	1	Y	1	Y	1	N	1	N	1
152	N	1	N	1	N	1	N	1	Y	1
153	Y	1	Y	1	Y	1	N	1		
										#5. I don't know what measures might be beneficial to aid that awareness.
154	Y	1	Y	1	Y	1	Y	1	Y	1
155	Y	1	Y	1	Y	1	N	1	N	1
156	Y	1	Y	1	Y	1	N	1	N	1
157	Y	1	Y	1	N	1	N	1	N	1
158	Y	1	Y	1	N	1	Y	1	N	1
159	Y	1	Y	1	Y	1	N	1	N	1
160	Y	1	Y	1	Y	1	Y	1	N	1
161	Y	1	Y	1	N	1	Y	1	Y	1
162	Y	1	Y	1	Y	1	Y	1	N	1
163	Y	1	Y	1	Y	1	Y	1	N	1
164	Y	1	Y	1	Y	1	Y	1	N	1
165	Y	1	N	1	Y	1	Y	1	N	1
166	Y	1	Y	1	Y	1	Y	1	N	1
167	Y	1	N	1	N	1	Y	1	N	1
168	Y	1	Y	1	Y	1	N	1	N	1
169	Y	1	Y	1	N	1	N	1	Y	1
170	Y	1	N	1	Y	1	N	1	Y	1
										#4. Police Dept.?
171	Y	1	Y	1	Y	1	Y	1	N	1
172	Y	1	Y	1	Y	1	Y	1	N	1
173	Y	1	Y	1	Y	1	Y	1	N	1
174	Y	1	Y	1	Y	1	Y	1	N	1
175	Y	1	Y	1	Y	1	Y	1	N	1
176	Y	1	Y	1	Y	1	Y	1	N	1
177	N	1	N	1	N	1	Y	1	Y	1
178	N	1	N	1	N	1	Y	1	Y	1
179	Y	1	Y	1	Y	1	Y	1	N	1
180	Y	1	Y	1	Y	1	Y	1	N	1
181	Y	1	Y	1	Y	1	Y	1	Y	1
182	Y	1	N	1	Y	1	Y	1	N	1

PAO Tierrasanta/Murphy Canyon OE Awareness Survey

183	Y	1	Y	1	Y	1	Y	1	N	1	
184	N	1	Y	1	Y	1	Y	1	Y	1	#4. 911
185	Y	1	Y	1	Y	1	N	1	N	1	#4. But it's probably on the signs - don't remember it.
186	Y	1	N	1	Y	1	N	1	N	1	
187	Y	1	Y	1	Y	1	Y	1	N	1	
188	Y	1	N	1	Y	1	N	1			
189	Y	1	Y	1	Y	1			Y	1	
190	Y	1	Y	1	Y	1	N	1	N	1	#4. But I could easily find out.
191	Y	1	Y	1	Y	1	N	1	N	1	
192	N	1	N	1	N	1	Y	1	?		
193	N	1	N	1	N	1	N	1	Y	1	#4. If not 911, then?
194	Y	1	Y	1	Y	1	N	1	N	1	
195	Y	1	Y	1	Y	1	N	1	N	1	
196	Y	1	N	1	Y	1	N	1	N	1	
197	Y	1	Y	1	Y	1	Y	1	N	1	#5. (Overkill!)
198	Y	1	N	1	Y	1	Y	1	N	1	
199	Y	1	Y	1	Y	1	N	1	N	1	
200	Y	1	Y	1	Y	1	Y	1	N	1	
201	Y	1	Y	1	Y	1	Y	1	N	1	
202	Y	1	Y	1	Y	1	N	1	N	1	
203	Y	1	Y	1	Y	1	Y	1	N	1	
204	Y	1	Y	1	Y	1	Y	1	N	1	
205	N	1	Y	1	N	1	N	1			#4. Maybe 911. #5. Its worthy of study.
206	Y	1	N	1	Y	1	N	1	N	1	
207	Y	1	Y	1	Y	1	Y	1	N	1	
208	Y	1	Y	1	Y	1	N	1	N	1	
209	Y	1	Y	1	Y	1	Y	1	N	1	
210	Y	1	N	1	Y	1	N	1	N	1	#4. But I'd read the sign to find out.
211	Y	1	Y	1	Y	1	Y	1	N	1	
212	Y	1	Y	1	Y	1	N	1	N	1	
213	Y	1	Y	1	Y	1	Y	1	Y	1	
214	Y	1	Y	1	Y	1	N	1			
215	Y	1	Y	1	Y	1	Y	1	N	1	
216	N	1	Y	1	Y	1	N	1	Y	1	
217	Y	1	Y	1	Y	1	Y	1	N	1	
218	Y	1	Y	1	Y	1	Y	1	N	1	
219	Y	1	Y	1	Y	1	N	1	N	1	
220	Y	1	Y	1	Y	1	N	1	N	1	
221	N	1	Y	1	N	1	N	1	Y	1	
222	Y	1	Y	1	Y	1	Y	1	N	1	
223	Y	1	Y	1	Y	1	Y	1	N	1	
224	Y	1	Y	1	Y	1	Y	1	N	1	
225	Y	1	N	1	Y	1	Y	1	N	1	
226	N	1	N	1	N	1	Y	1	Y	1	
227	N	1	Y	1	N	1	N	1			#5. I am not sure.
228	Y	1	Y	1	Y	1	Y	1	N	1	
229	Y	1	Y	1	Y	1	Y	1	N	1	
230	Y	1	Y	1	Y	1	N	1	N	1	
231	Y	1	Y	1	Y	1	N	1	N	1	
232	Y	1	Y	1	Y	1	Y	1	N	1	
233	Y	1	Y	1	Y	1	Y	1	N	1	

PAO Tierrasanta/Murphy Canyon OE Awareness Survey

234	Y	1	Y	1	Y	1	N	1	N	1	
235	Y	1	Y	1	Y	1	Y	1	N	1	
236	Y	1	Y	1	Y	1	Y	1	Y	1	
237	Y	1	Y	1	Y	1	Y	1	N	1	
238	Y	1	Y	1	Y	1	Y	1	N	1	
239	Y	1	N	1	Y	1	N	1			
240	Y	1	Y	1	Y	1	Y	1	N	1	
241	Y	1	Y	1	Y	1	N	1	Y	1	
242	Y	1	N	1	Y	1	N	1	N	1	#4. But I believe the signs mentioned in question #3 mentions whom to call.
243	Y	1	Y	1	Y	1	Y	1	N	1	
244	Y	1	Y	1	Y	1	Y	1	N	1	
245	Y	1	Y	1	Y	1	Y	1	N	1	#5. Doing a good job, Thanks.
246	Y	1	Y	1	Y	1	Y	1	N	1	
247	Y	1	Y	1	Y	1	Y	1	N	1	
248	Y	1	Y	1	Y	1	N	1	N	1	
249	Y	1	Y	1	Y	1	Y	1	Y	1	
250	Y	1	Y	1	Y	1	N	1			
251	Y	1	Y	1	Y	1	N	1	N	1	
252	N	1	N	1	N	1	N	1	Y	1	
253	Y	1	Y	1	Y	1	N	1	N	1	
254	Y	1	Y	1	Y	1	Y	1	N	1	
255	Y	1	Y	1	Y	1	Y	1	N	1	
256	Y	1	Y	1	Y	1	Y	1	N	1	
257	N	1	N	1	N	1	Y	1	Y	1	#4. 911
258	Y	1	Y	1	Y	1	Y	1	N	1	
259	N	1	N	1	N	1	Y	1	N	1	
260	N	1	N	1	N	1	N	1	N	1	
261	Y	1	N	1	Y	1	Y	1	Y	1	
262	Y	1	Y	1	Y	1	N	1	N	1	
263	Y	1	Y	1	Y	1	Y	1	N	1	
264	Y	1	N	1	Y	1	Y	1	N	1	
265	Y	1	Y	1	Y	1	Y	1	N	1	
266	N	1	N	1	Y	1	Y	1	Y	1	
267	Y	1	Y	1	Y	1	N	1	Y	1	
268	Y	1	Y	1	Y	1	Y	1	N	1	
269	Y	1	N	1	Y	1	Y	1	N	1	
270	Y	1	Y	1	Y	1	N	1	Y	1	
271	Y	1	N	1	Y	1	Y	1	N	1	
272	Y	1	Y	1	Y	1	Y	1	N	1	
273	Y	1	Y	1	Y	1	Y	1	N	1	
274	Y	1	Y	1	Y	1	Y	1	N	1	
275	Y	1	Y	1	Y	1	Y	1	N	1	
276	Y	1	Y	1	Y	1	Y	1	Y	1	
277	Y	1	Y	1	Y	1	Y	1	N	1	
278	Y	1	Y	1	Y	1	Y	1	N	1	
279	Y	1	Y	1	Y	1	Y	1	N	1	
280	Y	1	Y	1	Y	1	Y	1	N	1	
281	Y	1	Y	1	Y	1	Y	1	N	1	
282	Y	1	N	1	Y	1	Y	1	N	1	
283	Y	1	Y	1	Y	1	N	1	N	1	



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284	Y	1	Y	1	Y	1	N	1	N	1
285	Y	1	Y	1	Y	1	Y	1	N	1
286	Y	1	Y	1	Y	1	N	1	N	1
287	Y	1	Y	1	Y	1	N	1	N	1
288	Y	1	Y	1	Y	1	Y	1	N	1
289	Y	1	Y	1	Y	1	Y	1	N	1
290	Y	1	Y	1	Y	1	Y	1	N	1
291	Y	1	Y	1	Y	1	Y	1	N	1
292	Y	1	Y	1	Y	1	Y	1	N	1
293	Y	1	Y	1	Y	1	Y	1	N	1
294	Y	1	Y	1	N	1	N	1	N	1
295	Y	1	Y	1	Y	1	N	1	N	1
296	Y	1	N	1	Y	1	Y	1	N	1
297	Y	1	Y	1	Y	1	Y	1	?	
										#4. The numbers are on the signs.
										We will be retiring in the next 5 years and moving out of the area, so I am not interested.
298	Y	1	Y	1	Y	1	Y	1	N	1
299	Y	1	Y	1	Y	1	Y	1	N	1
300	Y	1	Y	1	Y	1	N	1	Y	1
301	Y	1	Y	1	N	1	N	1	Y	1
302	Y	1	Y	1	Y	1	Y	1	Y	1
303	Y	1	Y	1	Y	1	Y	1	N	1
304	N	1	N	1	N	1	N	1	N	1
305	Y	1	Y	1	Y	1	N	1	N	1
306	Y	1	Y	1	Y	1	N	1	N	1
307	Y	1	Y	1	Y	1	N	1	N	1
308	Y	1	Y	1	Y	1	Y	1	N	1
309	Y	1	Y	1	Y	1	Y	1	N	1
310	Y	1	Y	1	Y	1	Y	1	N	1
311	Y	1	Y	1	Y	1	Y	1	N	1
312	N	1	N	1	N	1	N	1	N	1
313	N	1	N	1	N	1	Y	1	N	1
314	Y	1	Y	1	Y	1	N	1		
315	Y	1	Y	1	Y	1	Y	1	N	1
316	Y	1	Y	1	Y	1	Y	1	N	1
317	Y	1	Y	1	Y	1	Y	1	N	1
318	Y	1	Y	1	Y	1	N	1	N	1
319	Y	1	Y	1	Y	1	Y	1	N	1
320	Y	1	Y	1	Y	1	Y	1	N	1
321	Y	1	Y	1	N	1	Y	1	N	1
322	Y	1	Y	1	Y	1	Y	1		
323	Y	1	Y	1	Y	1	Y	1	Y	1
324	Y	1	Y	1	Y	1	Y	1	N	1
325	Y	1	Y	1	Y	1	Y	1		#5. Unknown
326	Y	1	N	1	Y	1	Y	1	N	1
327	Y	1	Y	1	Y	1	N	1	N	1
328	Y	1	Y	1	Y	1	N	1	Y	1
329	Y	1	Y	1	Y	1	Y	1	N	1
330	Y	1	Y	1	Y	1	Y	1	N	1
331	Y	1	Y	1	Y	1	N	1	N	1
332	Y	1	Y	1	Y	1	N	1	N	1
333	Y	1	Y	1	Y	1	Y	1	N	1

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334	Y	1	Y	1	Y	1	Y	1	N	1	#2. I didn't know exact dates.
335	Y	1	Y	1	Y	1	Y	1	N	1	
336	Y	1	Y	1	Y	1	Y	1	N	1	
337	Y	1	Y	1	Y	1	Y	1	N	1	
338	Y	1	Y	1	Y	1	Y	1	N	1	
339	Y	1	N	1	Y	1	Y	1	N	1	
340	Y	1	Y	1	Y	1	Y	1	N	1	
341	Y	1	Y	1	Y	1	N	1	N	1	
342	Y	1	Y	1	Y	1	Y	1	N	1	
343	Y	1	Y	1	Y	1	Y	1	N	1	
344	Y	1	Y	1	Y	1	Y	1	N	1	
345	Y	1	Y	1	Y	1	Y	1	N	1	
346	Y	1	Y	1	Y	1	Y	1	N	1	
347	Y	1	N	1	Y	1	Y	1	N	1	
348	Y	1	Y	1	Y	1	Y	1	N	1	
349	N	1	Y	1	Y	1	Y	1	N	1	
350	N	1	N	1	N	1	N	1	Y	1	
351	Y	1	Y	1	Y	1	Y	1	N	1	
352	Y	1	Y	1	Y	1	Y	1	N	1	
353	Y	1	Y	1	Y	1	Y	1	Y	1	
354	Y	1	Y	1	Y	1	Y	1	N	1	
355	Y	1	Y	1	Y	1	Y	1	N	1	
356	Y	1	Y	1	Y	1	N	1	N	1	You all are doing a good job and I appreciate it.
357	Y	1	Y	1	Y	1	Y	1	N	1	
358	Y	1	Y	1	Y	1	Y	1	N	1	
359	Y	1	Y	1	Y	1	N	1	N	1	
360	Y	1	Y	1	Y	1	N	1	N	1	
361	Y	1	Y	1	Y	1	N	1	Y	1	#5. Continue periodic searches.
362	Y	1	Y	1	Y	1	Y	1	N	1	
363	Y	1	Y	1	Y	1	Y	1	N	1	
364	Y	1	Y	1	Y	1	Y	1	N	1	
365	Y	1	Y	1	Y	1	N	1	N	1	
366	Y	1	Y	1	Y	1	Y	1	N	1	
367	Y	1	Y	1	Y	1	N	1	N	1	
368	Y	1	Y	1	Y	1	Y	1	N	1	
369	Y	1	Y	1	Y	1	Y	1	N	1	
370	Y	1	Y	1	Y	1	Y	1	N	1	#1. Yes, now. Not when we bought the house.
371	Y	1	Y	1	Y	1	Y	1	N	1	
372	Y	1	Y	1	Y	1	N	1	N	1	
373	Y	1	Y	1	Y	1	Y	1	N	1	
374	N	1	Y	1	Y	1	?		Y	1	#1. Not when we bought it. #3. But only since they swept the area.
375	Y	1	Y	1	Y	1	N	1	N	1	
376	Y	1	Y	1	N	1	N	1	Y	1	
377	Y	1	Y	1	Y	1	N	1	N	1	
378	N	1	N	1	N	1	N	1	Y	1	#5. The housing office could make it known.
379	Y	1	N	1	Y	1	Y	1	N	1	
380	Y	1	Y	1	Y	1	Y	1			
381	Y	1	Y	1	Y	1	Y	1	N	1	#. # on the signs.
382	N	1	N	1	Y	1	Y	1	Y	1	
383	Y	1	N	1	N	1	Y	1	N	1	

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384	Y	1	Y	1	Y	1	Y	1	N	1	
385	Y	1	Y	1	N	1	Y	1	Y	1	
386	Y	1	Y	1	Y	1	Y	1	N	1	
387	Y	1	Y	1	Y	1	Y	1	N	1	
388	Y	1	Y	1	Y	1	Y	1	N	1	
389	Y	1	Y	1	Y	1	Y	1	N	1	
390	Y	1	Y	1	Y	1	N	1	Y	1	
391	Y	1	Y	1	Y	1	Y	1	N	1	
392	Y	1	Y	1	Y	1	N	1	N	1	
393	Y	1	Y	1	Y	1	Y	1	N	1	
394	Y	1	Y	1	Y	1	Y	1	N	1	
395	N	1	N	1	N	1	N	1	Y	1	
396	Y	1	Y	1	Y	1	Y	1	N	1	
397	Y	1	Y	1	Y	1	N	1			
398	Y	1	Y	1	Y	1	Y	1	N	1	
399	Y	1	Y	1	Y	1	N	1	Y	1	
400	Y	1	Y	1	Y	1	N	1	Y	1	
401	Y	1	Y	1	Y	1	Y	1	Y	1	
402	Y	1	Y	1	Y	1	Y	1	N	1	
403	Y	1	N	1	Y	1	Y	1	N	1	
404	N	1	N	1	N	1	N	1	N	1	
405	Y	1	Y	1	Y	1	N	1	N	1	
406	Y	1	Y	1	Y	1	N	1	N	1	
407	N	1	N	1	Y	1	N	1	N	1	
408	Y	1	Y	1	Y	1	N	1	N	1	
409	Y	1	Y	1	Y	1	Y	1	N	1	
410	Y	1	Y	1	Y	1	Y	1			#5. Maybe
411	Y	1	Y	1	Y	1	Y	1	N	1	
412	Y	1	Y	1	Y	1	N	1	N	1	
413	Y	1	Y	1	Y	1	Y	1	N	1	
414	Y	1	Y	1	Y	1	N	1	N	1	
415	Y	1	Y	1	Y	1	Y	1	N	1	
416	Y	1	Y	1	Y	1	N	1	N	1	
417	Y	1	Y	1	Y	1	Y	1	N	1	
418	Y	1	Y	1	Y	1	N	1	N	1	
419	Y	1	Y	1	Y	1	N	1	Y	1	
420	N	1	N	1	Y	1	N	1	Y	1	
421	Y	1	Y	1	Y	1	Y	1	N	1	Cannot participate. We are moving to Denver. Husband has orders.
422	Y	1	Y	1	Y	1	N	1	N	1	
423	N	1	N	1	N	1	N	1	Y	1	
424	Y	1	Y	1	Y	1	Y	1	Y	1	Are the parents aware that if their kids are gone for more than an hour that they could be in these dangerous areas?
425	N	1	N	1	N	1	Y	1	Y	1	#5. Just as this survey was sent out, maybe some type of letter/brochure with this information sent to homes would be helpful. I had no idea of this until this survey.
426	N	1	N	1	N	1	N	1	Y	1	#Continue cleanup of area in question.
427	Y	1	Y	1	Y	1	Y	1	Y	1	
428	Y	1	Y	1	Y	1	Y	1	N	1	

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429	Y	1	Y	1	Y	1	Y	1	N	1	#5. New homeowners/renters should be told about the ordinance history.
430	Y	1	Y	1	N	1	N	1	N	1	
431	Y	1	Y	1	Y	1	N	1	N	1	Keep up the good work!
432	Y	1	Y	1	Y	1	Y	1	N	1	
433	Y	1	Y	1	Y	1	Y	1	Y	1	#5. Just make sure warning signs are still in place and in good repair-over the years some have been damaged or destroyed.
434	Y	1	Y	1	Y	1	Y	1	Y	1	#5. In the event we have an unusual season of heavy rainfall, there is the danger of erosion uncovering deep-hidden ordinance!
435	Y	1	Y	1	Y	1	Y	1	Y	1	#5. More signs should be posted.
436	Y	1	Y	1	Y	1	N	1	N	1	
437	Y	1	Y	1	Y	1	Y	1	N	1	
438	Y	1	Y	1	Y	1	Y	1	N	1	
439	Y	1	Y	1	Y	1	N	1	Y	1	#4. Not really - I would call the fire department. #5. Annual educational-update posters in schools, stores, recreational center, etc. for those new in community.
440	Y	1	Y	1	Y	1	Y	1	N	1	#5. On-going education needs to be included in schools for children of the dangers.
441	Y	1	Y	1	Y	1	Y	1			
442	Y	1	Y	1	Y	1	Y	1	N	1	
443	Y	1	Y	1	Y	1	N	1	Y	1	#5. Why not post a sign of phone # at 2 main blvds.
444	Y	1	Y	1	Y	1	N	1			#5. I want to know if I can now safely walk through Shepard Canyon?
445	Y	1	Y	1	Y	1	N	1	Y	1	#5. Ongoing education @ the schools.
446	Y	1	Y	1	Y	1	N	1	N	1	
447	Y	1	Y	1	Y	1	Y	1	Y	1	
448	Y	1	Y	1	Y	1	Y	1	N	1	
449	Y	1	Y	1	Y	1	N	1	N	1	
450	N	1	N	1	N	1	N	1	Y	1	#5. More signs to let residents know of danger-also have navy housing inform prospective residents before they move in.
451	Y	1	Y	1	Y	1	Y	1	N	1	
452	Y	1	Y	1	Y	1	Y	1	N	1	
453	Y	1	Y	1	Y	1	Y	1	N	1	
454	Y	1	Y	1	Y	1	Y	1	N	1	#5. Parents should act responsible and supervise their children, this is the problem.
455	Y	1	Y	1	Y	1	N	1	N	1	
456	Y	1	Y	1	Y	1	Y	1	N	1	
457	Y	1	Y	1	Y	1	Y	1	N	1	
458	Y	1	Y	1	N	1	N	1	Y	1	A meeting in the library at Tierresanta Recreation Center for a community info.
459	Y	1	Y	1	Y	1	N	1	N	1	
460	Y	1	Y	1	Y	1	Y	1			#5. I don't know. I assumed the job was completed.
461	N	1	Y	1	Y	1	N	1	Y	1	
462	Y	1	Y	1	Y	1	Y	1	Y	1	
463	N	1	Y	1	N	1	N	1	Y	1	
464	Y	1	Y	1	Y	1	N	1	Y	1	
465	N	1	N	1	N	1	Y	1	Y	1	

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466	Y	1	Y	1	Y	1	N	1	Y	1	#5. Further ordnance investigation and clean-up & sweeps.
467	Y	1	Y	1	Y	1	Y	1	Y	1	#5. I think the community should be made aware of the problem at least every six months that includes Tierrasanta & Murphy Canyon.
468	Y	1	Y	1	Y	1	Y	1	N	1	
469	Y	1	Y	1	Y	1	Y	1	Y	1	#5. Coordinate with our open space committee citizen walks to visually sweep accessible areas of canyons.
470	Y	1	Y	1	Y	1	Y	1	N	1	
471	Y	1	Y	1	N	1	Y	1	Y	1	School children should be made aware of danger in class.
472	Y	1	Y	1	Y	1	Y	1	Y	1	
473	Y	1	Y	1	N	1	Y	1	N	1	
474	Y	1	Y	1	Y	1	Y	1	Y	1	#5. Additional periodic searches and continued information about what to do if you find a piece of unexploded ordnance.
475	Y	1	Y	1	Y	1	Y	1	Y	1	#2. Did not know dates. #5. Periodic sweeps and clean-ups using professionals and volunteers.
476	Y	1	Y	1	Y	1	Y	1	Y	1	
477	Y	1	Y	1	N	1	Y	1	Y	1	#2. Didn't know the exact date, but did know about the cleanup. Maybe a few more signs on the canyon trails-not just at the entrance of the trails, like some are now.
478	Y	1	Y	1	Y	1	Y	1	N	1	
479	Y	1	Y	1	Y	1	N	1	N	1	
480	Y	1	Y	1	Y	1	Y	1	N	1	
481	Y	1	Y	1	Y	1	Y	1	Y	1	
482	Y	1	Y	1	Y	1	Y	1	N	1	
483	Y	1	N	1	Y	1	Y	1	Y	1	
484	Y	1	Y	1	Y	1	N	1	Y	1	Nothing is mentioned to students and/or new residents, it seems as though it has been dropped since the cleanup ended.
485	Y	1	Y	1	Y	1	Y	1	N	1	
486	Y	1	Y	1	Y	1	Y	1	Y	1	#5. Continued education in the schools. Mailing to new residents. Signs in grocery stores.
487	Y	1	Y	1	Y	1	Y	1	Y	1	#5. How about a number of short videos available at the Tierrasanta Library specifically going thru history, cleanup, dangers and what to do?
488	Y	1	Y	1	Y	1	Y	1	Y	1	#5. There should be signs in open space bordering Averda, Playa, and Cancun.
489	Y	1	Y	1	Y	1	Y	1	Y	1	
490	N	1	N	1	N	1	Y	1	Y	1	
491	Y	1	Y	1	Y	1	Y	1	Y	1	#5. I don't know-but new people are always moving into Tierrasanta/Murphy Canyon and should be told both in our schools and to adults and children that do not go to local Tierresanta schools. Not everyone reads the local newspapers. We have already had a tragedy we should never have another one. Soil erosion is another way they will show up again.
492	Y	1	Y	1	Y	1	Y	1	N	1	
493	Y	1	Y	1	N	1	Y	1			#5. Cannot respond - do not know



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494	Y	1	N	1	Y	1	Y	1	Y	1	#2. But I am not surprised. #4. The signs say so I do not remember but I know where to look. #5. Sign in place other than hiking trails. A non-scary program for kids in local schools.
495	Y	1	Y	1	Y	1	Y	1	N	1	All residents seem to be very aware of ordnance problems previously reported.
496	Y	1	Y	1	Y	1	Y	1	N	1	
497	Y	1	Y	1	N	1	N	1	Y	1	Is it safe to walk in the canyons of Tierresanta?
498	Y	1	Y	1	Y	1	N	1	Y	1	#3. Not lately but I believe they are still posted. #5. Another round of sweeps to locateand eliminate any newly-exposed ordnance items since 1994 due to rains and ground movement.
499	Y	1	Y	1	Y	1	Y	1	N	1	#5. But we do feel continued surveillance is necessary to minimize risk from ordnance uncovered due to erosion, etc.
500	Y	1	Y	1	Y	1	N	1	N	1	
501	Y	1	Y	1	Y	1	Y	1	Y	1	Educational material should be availabe for every prospective new buyer who moves into the area.
502	Y	1	Y	1			N	1			#3. 1 only
503	Y	1	Y	1	Y	1	Y	1	N	1	
504	Y	1	Y	1	Y	1	Y	1	Y	1	
505	N	1	Y	1	Y	1	N	1	N	1	
506	Y	1	Y	1	Y	1	N	1	N	1	
507	Y	1	Y	1	Y	1	Y	1	Y	1	#2. Unsure as to years encompassed. Ordnance is unearthed after every major rainstorm. #3. Tierresanta (San Diego) Library and Serra high School Tierresanta actual disconnected ordnance local fire dept. (HAZMAT). #5. There appears to be an unfenced area behind the military on Santo Road in Murphy Canyon military housing and additional signs in areas where young children play. Disclosure when homes are purchased. Cut Santo Rd. through military housing to Mission Gorge to alleviate serious traffic problems. This area is a mile from Qualcomm Stadium which holds 78 thousand people.
508	Y	1	Y	1	Y	1	N	1	Y	1	
509	Y	1	Y	1	Y	1	Y	1	Y	1	#5. Just keep sweeping the area.
510	Y	1	Y	1	N	1	N	1	Y	1	#5. Information to the different schools.
511	Y	1	Y	1	Y	1	Y	1			
512	Y	1	N	1	N	1	Y	1	Y	1	#5. For navy members partial baq should be given to personnel living in this housing area due to potential hazardous materials and more signs with visible higher fencing allowed Murray Canyon to prevent child mistakes. For Navy members, the housing office needs to inform military members of the hazard prior to moving in.
513	Y	1	Y	1	Y	1	Y	1	N	1	
514	Y	1	Y	1	Y	1	Y	1	Y	1	#5. Insure all new people moving into area are well informed in a very timely maner.
515	Y	1	Y	1	Y	1	Y	1	Y	1	#5. Possibly run statement of potential hazard in local newspaper "Tierratimes"

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516	Y	1	Y	1	Y	1	Y	1	N	1	
517	Y	1	Y	1	Y	1	N	1	Y	1	#3. Signs only. #5. Who to call.
518	Y	1	Y	1	Y	1	Y	1	Y	1	#5. These 5 year reviews are necessary and some periodic articles in our local newspaper - The Tierra Times
519	Y	1	Y	1	Y	1	N	1	N	1	Regarding #4 we could figure it an unlikely event if we discover a suspicious item. #5. We have walked the trails and have seen the signs knocked down. Open space committee should monitor to ascertain signing is in place.
520	Y	1	Y	1	Y	1	Y	1	N	1	
521	Y	1	Y	1	Y	1	N	1			#1.However, we did not know when we moved here.
522	Y	1	Y	1	Y	1	Y	1	N	1	
523	Y	1	N	1	Y	1	N	1	Y	1	Literature written for children about the dangers and what to do if they see something suspicious. More signs posted. Another clean up.
524	Y	1	Y	1	Y	1	Y	1	Y	1	#5. New people move into the community all the time so constant awareness programs are needed.
525	Y	1	Y	1	Y	1	N	1	Y	1	
526	Y	1	Y	1	Y	1	Y	1	N	1	
527	Y	1	Y	1	Y	1	Y	1	N	1	
528	Y	1	Y	1	Y	1	Y	1	Y	1	Continue to periodically sweep the area for new ordnance which may surface.
529	Y	1	Y	1	Y	1	Y	1	N	1	#1. I was in a navy marine unit here in 1944.
530	Y	1	Y	1	Y	1	Y	1	Y	1	#5. Continue periodic sweeps as rainfall may expose more ordnance.
531	Y	1	Y	1	Y	1	Y	1	N	1	
532	Y	1	Y	1	Y	1	Y	1	N	1	
533	Y	1	Y	1	Y	1	Y	1	N	1	#5. But continue the program given in the local schools.
534	Y	1	Y	1	Y	1	Y	1	Y	1	
535	Y	1	Y	1	Y	1	Y	1	N	1	
536	Y	1	Y	1	Y	1	N	1	Y	1	#5. Maintain current efforts and child education.
537	Y	1	Y	1	Y	1	N	1			#5. Not sure.
538	Y	1	Y	1	Y	1	Y	1	Y	1	
539	Y	1	Y	1	Y	1	Y	1	N	1	
540	Y	1	Y	1	Y	1	Y	1	N	1	
541	Y	1	Y	1	Y	1	Y	1	N	1	
542	Y	1	Y	1	Y	1	Y	1	N	1	
543	Y	1	Y	1	Y	1	Y	1	Y	1	#5. A continuous educational and information process should always remain in effect because of military re-assignments in the community. These informative sessions should begin at the elementary school level and continue thru the high school level, plus periodic articles in the Tierra Times to educate the general adult population in our community.

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544	Y	1	Y	1	Y	1	Y	1	Y	1	#5. Incorporate classes &/or information about this subject into the community and classes at mission trails regional park educating people and letting them see what ordnance can look like is the key to safety for the community with regards to this issue. I know I would attend a walk that taught me about all the historical uses of this area and to know the US Army supports conservation of national habitats is always a plus.
545	Y	1	Y	1	Y	1	N	1	Y	1	
546	Y	1	Y	1	Y	1	Y	1	Y	1	#5. Move education of children, both within public schools and for pre-school children.
547	Y	1	Y	1	Y	1	Y	1	Y	1	#5. Pictures of possible/likely ordnance.
548	Y	1	Y	1	Y	1	N	1	N	1	
549	Y	1	Y	1	Y	1	Y	1	Y	1	
550	Y	1	Y	1	Y	1	Y	1	N	1	
551	Y	1	Y	1	Y	1	N	1	N	1	
552	N	1	Y	1	Y	1	Y	1	Y	1	#5. Routine advertisements in Tierra Times and direct mailers.
553	N	1	N	1	N	1	N	1	Y	1	
554	Y	1	Y	1	Y	1	Y	1			
555	N	1	N	1	N	1	N	1	Y	1	
556	N	1	Y	1	Y	1	N	1	Y	1	#5. Children who frequently visit the canyons should be made aware of the danger. Not by just signs in the canyons but maybe a school program.
557	Y	1	Y	1	Y	1	Y	1	Y	1	#5. On-going information for new residents sent home via schools. I don't feel this area is 100% clear of ordnance.
558	Y	1	Y	1	N	1	N	1	Y	1	
559	Y	1	Y	1	Y	1	N	1	N	1	
560	Y	1	Y	1	Y	1	Y	1	N	1	
561	N	1	N	1	N	1	N	1	Y	1	#5. Signs, newsletter.
562	Y	1	Y	1	Y	1	Y	1	N	1	
563	N	1	N	1	N	1	N	1	Y	1	
564	Y	1	Y	1	Y	1	N	1	N	1	
565	Y	1	Y	1	Y	1	Y	1	N	1	#5. Information signs currently located at points of entry to open-space areas are enough.
566	Y	1	Y	1	Y	1	Y	1	Y	1	#5. I feel after any heavy rains or earthquakes areas should be checked again.
567	Y	1	Y	1	Y	1	Y	1	N	1	
568	N	1	N	1	N	1	Y	1	N	1	
569	Y	1	Y	1	Y	1	N	1	N	1	
570	N	1	Y	1	Y	1	N	1	Y	1	#5. More publicity regarding dangers and who to contact.
571	Y	1	Y	1	Y	1	Y	1	Y	1	#5. Annual re-sweep of undeveloped areas by EOD.
572	Y	1	Y	1	Y	1	Y	1	Y	1	
573	Y	1	Y	1	Y	1	Y	1			

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574	Y	1	Y	1	Y	1	Y	1	Y	1	#2. I was aware there was a clean-up, but didn't know it was that long. #5. I think there should be occasional clean-up sweeps as the rains and weather shift the dirt/shrubs over time. Ordnance will continue to surface over time. I appreciate the fact that the Army Corps of Engineers sent out this survey in the Tierra Times.
575	Y	1	Y	1	Y	1	Y	1	N	1	#5. But thanks for asking
576	Y	1	Y	1	Y	1	N	1	N	1	
577	Y	1	Y	1	Y	1	N	1	N	1	
578	Y	1	Y	1	Y	1	Y	1	Y	1	#5. Education at elem Jr/Sr high schools and local churches ongoing continued frequent sweeps cleanups especially surrounding schools and churches.
579	Y	1	N	1	Y	1	Y	1	N	1	
580	N	1	N	1	N	1	N	1	N	1	#5. Informative 1-2 pg mailed phamplet signs in public areas. I am a new member of the community and have limited knowledge of the area. I moved here from Illinois.
581	Y	1	Y	1	Y	1	Y	1	Y	1	
582	Y	1	Y	1	Y	1	Y	1	N	1	
583	Y	1	Y	1	Y	1	N	1	N	1	
584	Y	1	Y	1	Y	1	Y	1	Y	1	
585	Y	1	Y	1	Y	1	N	1	Y	1	#4. As long as the signs stay up. #5. How about a refrigerator magnet with the reporting phone #?
586	Y	1	Y	1	Y	1	Y	1	Y	1	#5. Additional signs of warning at each area.
587	Y	1	Y	1	Y	1	N	1	Y	1	Educate the childrens K-12, go into the schools in uniform and show them actual disengaged ordnance. The real things so they actually know what to look for especially with the elementary and middle school kids. True stories I.e. kids in Tierresanta signs that kids and adults will understand by all entrances into canyon paths. Come to the schools in uniforms so children will see your presence and hopefully know you mean business!
588	N	1	N	1	N	1	N	1	Y	1	#5. Post signs at edge of canyon. Ensure people are informed as part of check into housing.
589	Y	1	Y	1	Y	1	N	1	N	1	
590	Y	1	Y	1	Y	1	N	1	Y	1	#5. Do an assessment of the likely presence of ordnance in yards.
591	Y	1	Y	1	Y	1	N	1	Y	1	#5. Routine self assessment sweeps should be coordinated to determine if erosion has surfaced any new ordnance.
592	Y	1	Y	1	Y	1	Y	1	N	1	
593	Y	1	Y	1	Y	1	N	1			#2. But not the years purchased here OCT 1996 #3. Posted sign on Clairmont Mesa Blvd. #4. I would call 911.
594	Y	1	Y	1	N	1	Y	1	Y	1	Additional protective measures required signs posted with numbers to call if ordnance is found or suspicious items are found. Include more information regarding this matter at housing offices ie: When checking into Murphy Canyon housing etc...
595	Y	1	Y	1	Y	1	Y	1	Y	1	#5. Educational measures in local schools.

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596	Y	1	Y	1	Y	1	N	1	Y	1	Maybe circulate pictures of past ordnance found.
597	Y	1	Y	1	Y	1	Y	1	N	1	
598	Y	1	N	1	Y	1	Y	1	Y	1	#3. A few. I think we do need additional warning signs. A focus group could also do assemblies at the local schools to raise awareness providing new home owners with info about this issue when they move in would be useful. They should do a sweep of the mission trails parks where many people walk, hike and ride bikes.
599	N	1	N	1	N	1	N	1	Y	1	What was the area exactly used for? And could it be harmful to kids?
600	N	1	N	1	N	1	N	1	Y	1	
601	Y	1	Y	1	Y	1	Y	1	Y	1	#4. I may be an exception to the typical respondent. I am aware of much of this info because my family was quite involved with this issue. My parents were key in facilitating the ordnance sweeps. #4. Whom to call, yes, but not the number.
602	Y	1	N	1	Y	1	N	1	N	1	
603	Y	1	Y	1	Y	1					#4. 911? Police? Fire dept? EOD? I recently moved to Tierresanta. The local weekly Tierra Times includes articles concerning the hazards associated with old explosives and ordnance. However lately I have not seen any mention of this problem. In review of the potential hazards to runners, walkers and children it would be a good idea to come up with some type of refresher awareness program either through the local media or public service announcements via radio.tv.
604	Y	1	Y	1	Y	1	N	1	Y	1	
605	Y	1	N	1	Y	1	Y	1	N	1	
606	Y	1	Y	1	Y	1	N	1	N	1	#1. Implies that all of Tierrsanta/Murphy Canyon continued ordnance. Is this true? #2. I didn't know it took 7 years.
607	Y	1	Y	1	Y	1	N	1			#5. Since no ordnance has been reported I think continuous monitoring should be done.
608	N	1	N	1			Y	1	N	1	
609	Y	1	Y	1	Y	1	Y	1	N	1	
610	Y	1	Y	1	Y	1	Y	1	Y	1	
611	Y	1	Y	1	Y	1	Y	1	N	1	
612	Y	1	Y	1	Y	1	Y	1	Y	1	
613	Y	1	Y	1	Y	1	Y	1	Y	1	#5. Scheduled notices every 3 months or announcements in local papers or other media that a hazard may exist.
614	Y	1	Y	1	Y	1	Y	1	N	1	
615	Y	1	Y	1	Y	1	N	1	N	1	
616	Y	1	Y	1	Y	1	Y	1	Y	1	
617	Y	1	Y	1	Y	1	Y	1	N	1	I have never seen suspicious items in canyon next to my home.
618	Y	1	Y	1	Y	1	Y	1	Y	1	#5. Occasional updates. People forget over time and new people move into the community.
619	Y	1	N	1	Y	1	N	1	Y	1	



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620	Y	1	N	1	N	1	Y	1	Y	1	#5. More info on the subject found so we can warn the children of where they should and shouldn't play. More communication with the public.
621	Y	1	Y	1	Y	1	N	1			
622	N	1	N	1	Y	1	N	1	Y	1	
623	Y	1	Y	1	Y	1	Y	1	N	1	
624	Y	1	Y	1	Y	1	Y	1	N	1	
625	Y	1	Y	1	Y	1	N	1	N	1	
626	Y	1	Y	1	Y	1			Y	1	#2. Weren't there cleanup efforts prior to 1987? #5. Future periodic sweeps should occur. #4. Not sure.
627	N	1	N	1	N	1	N	1	N	1	
628	Y	1	Y	1	N	1	N	1	Y	1	#5. Make this awareness part of the housing move in brief/process.
629	Y	1	Y	1	N	1	Y	1	Y	1	
630	Y	1	Y	1	Y	1	Y	1	Y	1	#3. Yes, after my friend blew up. I want a guarantee that which happened in the past does not happen again.
631	Y	1	N	1	Y	1	Y	1	N	1	
632	Y	1	Y	1	Y	1	N	1	Y	1	Who to call should be as comon knowledge as dialing 411 for directory assistance. An ordnace hotline listing through 411 might help
633	Y	1	Y	1	Y	1	N	1	Y	1	
634	N	1	N	1	N	1	Y	1	Y	1	
635	Y	1	Y	1	Y	1	N	1			#5. Not sure I thought it was all cleaned up.
636	Y	1	Y	1	Y	1	Y	1	Y	1	#5. Maintain the signs and a few annual educational sessions.
637	Y	1	Y	1	Y	1	Y	1			
638	Y	1	Y	1	Y	1	Y	1			
639	Y	1	Y	1	N	1	N	1	Y	1	
640	Y	1	Y	1	Y	1	Y	1	Y	1	It would be beneficial to inform potential home purchasers or new renters by including a notice in all materials provided by real estate offices and rental agents. I do not know if this is now being done.
641	Y	1	Y	1	Y	1	Y	1	Y	1	#5. Periodic additional sweeps.
642	Y	1	N	1	Y	1	N	1	Y	1	#5. I think an informative letter would be beneficial covering what ordnance looks like and who to contact.
643	N	1	N	1	Y	1	Y	1	Y	1	#5. Put up information billboards at significant places for further awareness.
644	Y	1	Y	1	Y	1	Y	1	Y	1	Awareness info should be given to new residents as they move into the community.
645	Y	1	Y	1	Y	1	Y	1	Y	1	#5. Another sweep in about 5 years.

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646	Y	1	Y	1	Y	1	Y	1	Y	1	#5. A general flyer explaining the situation of the current residents of the Tierresanta/Murphy Canyon communities with numbers for POCs and agencies to call. I am sure there has been enough turnovers of residents so warrant at least this action. Especially in light of the event of this past year, when a long time resident found apiece of ordnance and transported to his front door where it stayed for several days he finally decided to call EOD when it attracted the attention of the neighborhood children who were playing with it. Luckily it was a training round but you can see where this could have been a disaster waiting to happen. This resident admitted to knowing better just think about those that don't or the children and I think a mailing would be in order.
647	N	1	N	1	Y	1	N	1	N	1	
648	Y	1	Y	1	Y	1	Y	1	N	1	
649	Y	1	N	1	Y	1	Y	1	Y	1	#5. Entrance to Mission Trails Park need more signs.
650	Y	1	Y	1	Y	1			N	1	
651	Y	1	Y	1	Y	1	N	1	N	1	
652	Y	1	N	1	Y	1	Y	1	Y	1	#3. In Tierresanta by my children's school yes, in military housing no. #5. Yes for the Murphy Canyon community especially you find out about this by being in the Tierrasanta area. I lived here for 2 years before finding out that we were also on the Camp Elliot site and that we should be cautious.
653	Y	1	Y	1	Y	1	Y	1	Y	1	#5. Send info on what the ordnance might look like.
654	Y	1	Y	1	Y	1	N	1	N	1	#3. Only by word of mouth.
655	Y	1	N	1	Y	1	Y	1	N	1	
656	Y	1	Y	1	Y	1	Y	1	Y	1	#4. I know how to find out who to call. #5. Is there movement in/out of the community each year, a phone sticker could be sent out annually to all households with 1 page reminder of possible problems. I hope there are annual reminders in the school. Is there an annual check of all warning signs to see if they are still there? Are more signs needed at different entrances to this area?
657	N	1	N	1	N	1	N	1	Y	1	The public should be more aware of what is happening in our community. There should be a townhall discussion in our area.
658	Y	1	Y	1	Y	1	Y	1	Y	1	#5. 1 page circular sent to the home. I have lived in Tierrasanta for over 10 years and am aware of the ordnance. However, I have several new neighbors who could use some of the basic hazard information.
659	Y	1	Y	1	Y	1	N	1	Y	1	
660	Y	1	Y	1	Y	1	Y	1	N	1	
661	Y	1	Y	1	Y	1	Y	1	N	1	
662	Y	1	Y	1	Y	1	N	1			#5. How would a layman know how to answer this? Dumb Question!.
663	Y	1	Y	1	Y	1	Y	1	N	1	
664	Y	1	Y	1	N	1	N	1	Y	1	

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665	Y	1	Y	1	Y	1	Y	1	Y	1	#5. Keep signs updated. Rusty signs do not attract positive attention.
666	Y	1	Y	1	Y	1	Y	1	N	1	
667	Y	1	Y	1	Y	1	N	1	Y	1	#5. Supply schools with information or handouts and more signs in areas of question.
668	Y	1	Y	1	Y	1	Y	1	N	1	
669	Y	1	Y	1	N	1	N	1	Y	1	#3. I know of one. #5. More signs in areas.
670	Y	1	Y	1	Y	1	Y	1	Y	1	#3. In past but not recently. #4. Many kids/parents don't know we must keep (continue) education. In the past fire dept. came to each school once or twice per year showed a great video and talk. Hold a community meeting once per year.
671	N	1	N	1	N	1	Y	1	Y	1	If there are possibly explosives in this area why aren't occupants being informed of this? I know I wasn't. I think all residents need to be made aware. I found this survey in a newspaper that normally gets tossed into the recycling bin before anyone has a chance to read it.
672	Y	1	Y	1	Y	1	N	1	N	1	
673	Y	1	Y	1	Y	1	Y	1	N	1	
674	Y	1	N	1	Y	1	N	1	Y	1	
675	Y	1	Y	1	Y	1	Y	1	Y	1	Additional postings/warning signs or borders of restricted hazardous areas. Periodic notices in the Tierra Times newspaper to alert new residents of the area and nature of hazards.
676	Y	1	Y	1	Y	1	N	1	Y	1	#5. A program should be presented in the schools and in a handout and should be printed and delivered in the Tierra Times annual. Something suitable to be kept on the fridge.
677	Y	1	Y	1	Y	1			Y	1	#4. Police? Look in Tierra Times. #5. Continue to place warnings in newspapers for new resident children.
678	Y	1	Y	1	N	1	N	1	Y	1	#3. Not sure (possibly a sign. #5. I'd like to see a map of affected areas.
679	Y	1	Y	1	Y	1	Y	1	Y	1	
680	Y	1	Y	1	Y	1	Y	1	N	1	
681	Y	1	Y	1	Y	1	Y	1	N	1	
682	Y	1	Y	1	Y	1	N	1	N	1	
683	Y	1	Y	1	N	1	N	1			
684	Y	1	Y	1	Y	1	Y	1	N	1	
685	Y	1	Y	1	Y	1	N	1	Y	1	#4. Police? #5. Informational forums or letters to the community.
686	Y	1	Y	1	Y	1	Y	1	N	1	
687	N	1	Y	1	Y	1	Y	1	N	1	
688	Y	1	Y	1	Y	1	Y	1	N	1	
689	Y	1	Y	1	Y	1	N	1	Y	1	#4. But I would look it up in the Tierra Times. #5. Training at schools w/flyers to families since most concerns are children.
690	N	1	N	1	N	1	Y	1	Y	1	#4. Only because I saw it in the Tierra Times the same issue as this survey lived here 1 1/2 yrs. Mark / dial 911. #5. More frequent articles in paper and better signage.

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691	N	1	N	1	N	1	N	1	Y	1	
692	Y	1	Y	1	Y	1	N	1			#2. However I had been led to believe that the cleanup extended beyond 1994 till possibly 96 or 97. #4. Do the signs provide this info? #5. Don't know.
693	Y	1	N	1	Y	1	Y	1	N	1	#2. But assumed it had done so. #5. I have seen the sign warning of potential hazards the only thing that might be beneficial is to have the schools in the area advise the kids sometimes they ignore signs. I have lived her 7 yrs and have heard of no problems.
694	N	1	N	1	N	1	N	1	Y	1	
695	Y	1	Y	1	Y	1	N	1	N	1	
696	Y	1	Y	1	Y	1	N	1			#4. I assume I'd call Minamer Marine base for info. #5. Warnings and reminders once a year to all Tierrasante residents and talks at all local school.
697	Y	1	Y	1	Y	1	N	1	N	1	
698	Y	1	Y	1	Y	1	N	1	N	1	
699	Y	1	Y	1	Y	1	Y	1	N	1	
700	Y	1	Y	1	Y	1	Y	1	N	1	
701	Y	1	N	1	Y	1	Y	1	N	1	
702	Y	1	Y	1	Y	1	Y	1	N	1	
703	Y	1	N	1	N	1	Y	1	Y	1	
704	Y	1	Y	1	Y	1	Y	1	Y	1	
705	N	1	N	1	Y	1	N	1	Y	1	
706	Y	1	Y	1	Y	1			Y	1	#4. 911? #5. Continual Tierra Times articles. Info in schools since ordnance can be found in many parts of San Diego most recently in La Jolla.
707	Y	1	Y	1	Y	1	Y	1	Y	1	#5. Clearly post more signs for areas that are safe (trails, etc).
708	Y	1	Y	1	Y	1	Y	1	Y	1	#5. Its time for another sweep.
709	Y	1	Y	1	Y	1	Y	1	N	1	#5. No, anyone who goes for a walk will encounter the warning signs. Anybody who doesn't know must never be interested in anything but tv shows.
710	Y	1	Y	1	Y	1	Y	1	Y	1	
711	Y	1	Y	1	Y	1	N	1	Y	1	#3. In Tierra Times. #4. I would call Tierresanta Council or number on the open space signs. #5. Every 5 years, a surface sweep should be done.
712	Y	1	Y	1	Y	1	Y	1	Y	1	
713	Y	1	Y	1	Y	1	Y	1	Y	1	
714	Y	1	Y	1	Y	1	N	1	Y	1	#5. Additional signs in highly used areas. Ads in local publications.
715	Y	1	Y	1	Y	1	N	1	N	1	
716	Y	1	N	1	Y	1	Y	1	Y	1	#5. As long as the environment isn't compromised or affected. The last time your office conducted surveillance markers stakes and paint sprayed areas were left __trash.
717	Y	1	N	1	Y	1	N	1	N	1	
718	Y	1	Y	1	Y	1	Y	1	Y	1	Periodic info dissimulation so people in Tierresanta are reminded of the danger until when? This is a good question that maybe answered by each family. I say until my 4 & 7 yrs olds are old enough to know what explosives or dangerous objects look like.

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719	N	1	N	1	N	1	N	1	N	1	
720	Y	1	Y	1	Y	1	Y	1			#4. Police, I haven't noticed a sign for a long time-- some may be hidden by natural growth. Notices in local small publications such as Tierresanta Times.
721	Y	1	Y	1	Y	1	N	1	N	1	#5. Not really maybe a phone # to call if anything is found.
722	Y	1	N	1	Y	1	Y	1	Y	1	
723	Y	1	Y	1	Y	1	N	1	Y	1	#4. Probably on signs and newspaper columns for community relations info. Thanks for this, maybe a sweep should be made each spring after a rainy season.
724	Y	1	Y	1	Y	1	Y	1	N	1	
725	Y	1	Y	1	Y	1	Y	1	N	1	
726	Y	1	Y	1	Y	1	Y	1	N	1	
727	Y	1	Y	1	Y	1	Y	1	N	1	
728	Y	1	Y	1	Y	1	N	1			#2. Somewhat
729	N	1	Y	1	Y	1	Y	1	Y	1	#5. More signs
730	Y	1	Y	1	Y	1	N	1	Y	1	
731	Y	1	Y	1	Y	1	Y	1	Y	1	#5. Include an insert with the Tierra Times quarterly or bi-annually a flyer to educate on a continuing basis, public awareness of ordnance issues. If costs would allow it a colorful flyer that would provide clear graphics that would help identify those ordnance along with a list of steps and who or what # to call so that it can be placed near the phone or fridge. I find the Tierra Times to be a good source of info for the community and can be utilized to help distribute an educational tool.
732	Y	1	Y	1	Y	1	Y	1	Y	1	Permanent displays at places where community members frequent, post office, library, Blockbuster, rec center, grocery store, and Wal-Mart. You can make it a positive focus on the benefits of the military and what they meant to the areas where Camp Elliott was in full swing. It could be done as a memorial to the two boys who were killed. We have lived here 22 yrs my boys grew up in the canyons we never had a problem, praise God, but the danger is there. Thanks for your efforts. As long as people live here and move in here the education will need to continue.
733	Y	1	Y	1	Y	1	Y	1	Y	1	#5. Teach people about the past, how people have died in Tierrasanta and that more can die. No one knows this better than me. I have the life experience about Tierrasanta.
734	Y	1	Y	1	Y	1	N	1	N	1	#4. But I know how to find out.
735	Y	1	N	1	Y	1	N	1	Y	1	
736	N	1	Y	1	Y	1	N	1	Y	1	#3. Signs only.
737	Y	1	Y	1	Y	1	N	1	N	1	
738	Y	1	Y	1	Y	1	Y	1	N	1	#5. I don't know what else can be done. A lot has already been done to address this issue.any other ideas and I would support them if they are practical and comprehensive.



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739	Y	1	Y	1	Y	1	N	1	Y	1	#5. Continued advertising articles etc to educate public - -Especially important to continue education (safety issues) in our local elementary/middle/high schools.
740	Y	1	Y	1	Y	1	Y	1	Y	1	#1. Camp Elliott? #2 I saw them or someone #3 The local paper Tierra Times #4 The paper provides a local # #5 Mostly assure the community uses the local schools, it can't hurt. Thank you for your concern.
741	Y	1	Y	1	Y	1	Y	1	N	1	
742	N	1	N	1	N	1	N	1	N	1	Had to look up ordnance in the dictionary to find out what you were talking about. Might want to use more common sense words based on the importance of the topic.
743	N	1	Y	1	Y	1	N	1	Y	1	
744	Y	1	Y	1	Y	1	N	1	Y	1	
745	Y	1	Y	1	Y	1	N	1	Y	1	#4. 911? #5 Reminders after storms. That seems to be when problems surface.
746	Y	1	N	1	Y	1	N	1	N	1	
747	Y	1	Y	1	Y	1	Y	1	N	1	My house is on a canyon where ordnance has been uncovered 50 ft from my backyard I believe very thorough search was done. I am satisfied a serious program was implemented to discover additional materials.
748	Y	1	Y	1	Y	1	Y	1	Y	1	#5. Update sweeps of area since 94
749	Y	1	Y	1	Y	1	Y	1	Y	1	#5. Continued warnings need to be included in the local community newspaper Tierra Times. POC: Mike Smiley (619) 576-0167 or call 911.
750	Y	1	Y	1	N	1	Y	1			#3. I just walk on the sidewalk. I have heard that they do have warning signs. #5. Children go in the pool and parents are with them. I think it is covered in Tierra Santa to worry about snakes and kids that do damage and steal.
751	Y	1	Y	1	Y	1	Y	1	N	1	
752	Y	1	Y	1	Y	1	N	1	Y	1	#5. Repeat info for children.
753	Y	1	Y	1	Y	1	Y	1	Y	1	#5. Better sweeping of area.
754	Y	1	Y	1	N	1	N	1	Y	1	#3. Just heard about it.
755	Y	1	Y	1	Y	1	Y	1	N	1	
756	Y	1	Y	1	Y	1	Y	1	Y	1	#5. Special program or brochures that parents can use to teach children of danger and how to handle there are still issues w/the kids.
757	Y	1	Y	1	Y	1	N	1	Y	1	
758	N	1	N	1	N	1	N	1	Y	1	
759	Y	1	Y	1	Y	1	Y	1	Y	1	#5. I am concerned about possiblilty of accidents especially in proximity to Navy Housing as it is a very mobile community.
760	N	1	N	1	Y	1	N	1			
761	N	1	N	1	N	1	N	1	Y	1	

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762	Y	1	Y	1	Y	1	Y	1	Y	1	My concern I have lived in the Tierrasanta area for most of 15 yrs. The concern I have is the change in the communities. People moving in and out of this area. I bring to their attention the history of this area. From the beginning history being Camp Elliot to the ordnance in the area and to be informed. Most of all to pass on the info and to make the children aware, not to touch and stay out of the canyons.
763	Y	1	Y	1	Y	1	N	1	Y	1	#5. It should be updated from time to time to inform newcomers especially children.
764	Y	1	Y	1	Y	1	Y	1	Y	1	#5. Sporadic search on ordnance every 5 years that might be exposed due to erosion.
765	Y	1	Y	1	Y	1	N	1	N	1	
766	Y	1	Y	1	Y	1	N	1			
767	Y	1	Y	1	Y	1	N	1	Y	1	Are additional sweeps planned?
768	Y	1	Y	1	Y	1	N	1	Y	1	#5. Where to call if a device is found.
769	Y	1	Y	1	Y	1	N	1	Y	1	Additional measures which may be beneficial include Ordnance Information in: 1) the local Tierrasanta Library. 2) Neighborhood Schools (Elementary, Middle & High School). 3) Information Bulletin in the local Tierrasanta Times. 4) Information bulletin/advertisement in the neighborhood. 5) Information bulletin forward to the community via mail, etc.
770	Y	1	Y	1	Y	1	N	1	Y	1	#5 Education should be on-going as new families move in and as the children get older and understand the danger.
771	Y	1	Y	1	Y	1	N	1	N	1	
772	Y	1	Y	1	Y	1	Y	1	N	1	
773	Y	1	Y	1	Y	1	Y	1	Y	1	#1. I was not aware when we purchased a home in Tierresanta. #5. Children in the schools need yearly lessons about ordnance safety. The community also needs safety reminders in the Tierra Times local newspaper. Thank you for your efforts on behalf of all who lives in Tierresanta especially the children.
774	Y	1	Y	1	Y	1	Y	1	N	1	
775	Y	1	Y	1	Y	1	Y	1	N	1	
776	Y	1	Y	1	Y	1	Y	1	N	1	
777	Y	1	Y	1	Y	1	Y	1	N	1	
778	Y	1	Y	1	Y	1	Y	1	N	1	
779	N	1	Y	1	N	1	Y	1	N	1	
780	Y	1	Y	1	Y	1	Y	1	N	1	
781	Y	1	Y	1	Y	1	N	1	Y	1	#5. Continue to conduct annual sweeps of Tierresanta.
782	Y	1	Y	1	Y	1	N	1	Y	1	#5. Periodic articles in Tierra Times so that new residents are aware. Educate at school. Periodic warning on Serra High marquis as a community services.
783	Y	1	Y	1	Y	1	N	1	N	1	

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784	Y	1	Y	1	N	1	Y	1	Y	1	#5. The signs by Vista Grand Elementary should be placed by the sidewalk instead of in the canyon. I have seen many children going down there either to try and read the signs or play by them.
785	Y	1	Y	1	Y	1	Y	1	N	1	#5. A continued checking maybe twice a yr would work fine. Nature seem to bring the ordnance to the surface.
786	Y	1	Y	1	Y	1	Y	1	N	1	
787	Y	1	Y	1	Y	1	Y	1	Y	1	Please review this issue regularly in schools and in our local newspaper.
788	Y	1	Y	1	Y	1	Y	1	N	1	
789	Y	1	Y	1	Y	1	Y	1	Y	1	
790	Y	1	Y	1	Y	1	Y	1	Y	1	Repeat cleanup operation. Thank you. Keep reminding us of the problem.
791	Y	1	Y	1	Y	1	Y	1	N	1	
792	Y	1	Y	1	Y	1	Y	1	N	1	
793	Y	1	Y	1	Y	1	N	1	Y	1	
794	Y	1	Y	1	Y	1	Y	1	Y	1	
795	Y	1	Y	1	Y	1	Y	1	N	1	
796	Y	1	Y	1	N	1	N	1			
797	N	1	N	1	Y	1	N	1	Y	1	
798	Y	1	Y	1	Y	1	N	1	N	1	
799	Y	1	Y	1	Y	1	Y	1	N	1	
800	Y	1	Y	1	Y	1	Y	1	N	1	
801	Y	1	Y	1	Y	1	Y	1	N	1	
802	Y	1	Y	1	Y	1	Y	1	Y	1	Perhaps a representative from Army Corps could visit local schools to help educate children about this situation and give displays etc. on an annual basis. This would help to understand the potential dangers, what to be aware of and underscore the instructions of parents who don't always know anything at least according to children.
803	Y	1	Y	1	Y	1	Y	1	N	1	#5 But the community should continue an awareness program for current residents and more importantly new residents. If it is not now done a periodic reconnaissance of the open areas should be conducted by trained engineers.
804	Y	1	Y	1	Y	1	N	1			#4. But we could figure it out through local resources. #5. Not necessarily. Perhaps additional signs near mission trails park entrances.
805	Y	1	Y	1	Y	1	N	1	Y	1	Warning signs in Canyon entrances should be sufficient. Periodic notices in other media to ensure new arrivals are aware of the history and potential hazards.
806	Y	1	Y	1	Y	1	N	1			#5 possibly more warning signs
807	Y	1	Y	1	Y	1	Y	1	Y	1	#5 continued maintenance of signage
808	Y	1	Y	1	Y	1	N	1			#4. I would call the police. #5 it might help if the warning was placed in the newspaper once in awhile.
809	Y	1	Y	1	Y	1	Y	1	Y	1	#5 Constantly
810	Y	1	Y	1	Y	1	Y	1	Y	1	#2 Did not know exact dates #4 Look at # on signs #5 Parents should warn their kids and keep tabs on kids.

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811	Y	1	Y	1	Y	1	N	1	Y	1	#5 being a resident of Murphy Canyon a lot of family move in and out on a reg basis. I think info should be given out when a military family moves in. We lived here 2 yrs before we knew about the property being used as a defense site.
812	Y	1	Y	1	Y	1	Y	1	Y	1	#5. More publicity would be good.
813	Y	1	Y	1	Y	1	N	1	Y	1	#5. Keep signs on open spaces canyons and keep informing shcools children of the dangers.
814	Y	1	Y	1	Y	1	Y	1	N	1	#5. This project has served its purpose and is no longer needed by this community.
815	Y	1	Y	1	N	1	N	1	Y	1	#4. Specifically. We should truly be talking to the children at school as early as kindergarten including identification, dangers, what to do if you encounter such devices, and other related info age appropriate.
816	Y	1	Y	1	Y	1	Y	1	Y	1	#5 Annual reminders in the spring
817	Y	1	Y	1	Y	1	Y	1	Y	1	#5 More educational material and warnings.
818	Y	1	Y	1	Y	1	Y	1	Y	1	Publicity of any kind is always good.
819	Y	1	Y	1	Y	1	Y	1	Y	1	#5. Continued preservations at elem middle schools. Do you still do this?
820	Y	1	Y	1	Y	1	Y	1			#5.We have been here since 1972 I don't know if people who have come more recently are aware of the history of this area.
821	Y	1	Y	1	Y	1	Y	1	Y	1	#5 More signs at canyon entrances.
822	Y	1	Y	1	Y	1	Y	1	Y	1	#4. 911? #5. Our realtor says they inform the kids at school but our kids say this doesn't happen.
823	Y	1	Y	1	Y	1	Y	1	N	1	#5 Signage should be satisfactory.
824	Y	1	Y	1	Y	1	N	1	Y	1	#5. Continue programs in schools to make children aware of danger.
825	Y	1	Y	1	Y	1	Y	1	Y	1	#5 Have signs posted at site where material has been found the most. Close off that area or areas where material has been located.
826	Y	1	Y	1	Y	1	Y	1	Y	1	
827	Y	1	Y	1	Y	1	Y	1	Y	1	#5 Additional education for young school children and more hazard signs.
828	N	1	Y	1	Y	1	Y	1			#5 Continue educational programs for youth and adults.
829	Y	1	Y	1	Y	1	Y	1	Y	1	#5 Keep signs posted warning of potential danger complete disclosure by realtors when property bought.
830	Y	1	Y	1	Y	1	Y	1	Y	1	#5 As time goes on people need to be reminded and newer residents need to be informed. Newspapers would be a good way to keep attention.
831	Y	1	Y	1	Y	1	N	1	Y	1	#5 Because the run off from rain can expose ordnance not discovered in previous sweeps additional sweeps should be made periodically.
832	Y	1	Y	1	Y	1	Y	1	Y	1	Continue to inform newcomers to the community about ordnance concerns.
833	Y	1	Y	1	Y	1	Y	1	Y	1	#5 Resweep area every 5 years after possible erosion, don't allow more children to die!
834	Y	1	Y	1	N	1	N	1	Y	1	#5 Increase the awareness for newcomer residents and repeat it for everyone.

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835	N	1	N	1	Y	1	Y	1	Y	1	#4. 911, I assume. #5. Put educational posters in the library and in other public places.
836	Y	1	Y	1	Y	1	Y	1	N	1	Absolute waste of taxpayer money. Typical bureacratic bulls---
837	Y	1	Y	1	Y	1	Y	1	Y	1	#5. Periodic ordnance cleanup sweeps of the area. These ordinances keep surfacing and pose a danger to our children.
838	Y	1	Y	1	Y	1	Y	1	N	1	We feel substantial cleanups have been performed.
839	Y	1	Y	1	Y	1	Y	1	Y	1	#5 Periodic checks of hiking trail and surrounding area to ensure maximum safety. Have warning signs in the area.
840	Y	1	Y	1	Y	1	Y	1	Y	1	#5 Warnings posted, children educated at school and notices in Tierra Times. Please keep up the good work, thanks.
841	Y	1	Y	1	Y	1	Y	1	Y	1	We feel that you have done more than adequate job in addressing the issue.
842	Y	1	Y	1	Y	1	N	1	Y	1	#5 Please continue educating the public because new people move in this area.
843	Y	1	Y	1	Y	1	Y	1	Y	1	#5 Advertise awareness more in Tierra Times.
844	N	1	N	1	N	1	Y	1	Y	1	Upon moving in, it should be included with our packet that we receive in Murphy Canyon so we are made aware of it.
845	Y	1	Y	1	Y	1	Y	1	Y	1	#5 Once each year or a review of the area should be surveyed to see if erosion has occurred.
846	Y	1	Y	1	N	1	N	1	Y	1	#5 Children don't know what ordnance is, the young ones may know danger and keep out signs must be simple for them.
847	N	1	N	1	N	1	N	1	Y	1	#5. Inform and educate residents.
848	Y	1	Y	1	Y	1	Y	1	Y	1	#5 Make continous in school education on an annual basis; new homeowners should also be officially notified.
849	Y	1	Y	1	Y	1	Y	1	Y	1	#5 Put it in elementary school education every year.
850	Y	1	Y	1	Y	1	Y	1	Y	1	#5 As long as the problem exists periodic notices should be placed in a periodical of general circulation in the community.
851	Y	1	Y	1	Y	1	N	1	Y	1	#5 Additional publicity about the danger in a variety of ways. Not long residents of the community may not be aware. If people don't happen to see signs posted in canyons they will have no idea.
852	Y	1	Y	1	N	1	N	1	Y	1	#5 Deliver brochures to homes citing problems; show examples of ordnance.
853	Y	1	Y	1	Y	1	Y	1	Y	1	#5 I am not sure if educational programs are still going on for elementary children, this is critical.
854	Y	1	Y	1	Y	1	Y	1	Y	1	#5 I'd like ACE to conduct routine sweeps to assess if ordnance has surfaced and make decisions and take appropriate action to keep TS/M safe.
855	Y	1	Y	1	Y	1					The Tierra Times does a good job on this by reminders.
856	Y	1	Y	1	Y	1	Y	1	Y	1	#5 Continue same measures signs posted etc.
857	Y	1	Y	1	Y	1	N	1	Y	1	#5 Newsletters, meetings, etc.



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858	Y	1	Y	1	Y	1	N	1	Y	1	#5 Send periodic press releases to Tierresanta media every 6 months or so to remind the population of possible danger and advise them on whom to call.
859	Y	1	Y	1	Y	1	Y	1	Y	1	#5 continued educational programs in the schools
860	Y	1	Y	1	Y	1	Y	1	Y	1	#5 Provide more sweeps.
861	Y	1	Y	1	Y	1	Y	1	Y	1	#5 Continue education of ordnance at schools.
862	Y	1	Y	1	N	1	N	1	N	1	No there has been enough info on this problem. New owners or renters should receive a notice especially ones with children informing them of the danger. Parents must inform their children of the danger.
863	Y	1	Y	1	Y	1	Y	1	Y	1	#5 Keep reminding personnel of the potential presence and danger of ordnance in the area at least every six months.
864	N	1	N	1	N	1	N	1	Y	1	#5 We live in the Navy housing area and were not given any info when we moved in, why am I not surprised?!?
865	Y	1	Y	1	Y	1	N	1	Y	1	#5 Freshen the signs, they are old. Continue ongoing education of ordnance in schools.
866	Y	1	Y	1	Y	1	Y	1	Y	1	#5 Keep doing periodic ordnance cleanups.
867	Y	1	Y	1	Y	1	Y	1	Y	1	#5 Reeducation of public because new people are always moving in.
868	Y	1	Y	1	Y	1	N	1	N	1	Ordnance Disposal contact phone number should appear in U.S. Government Officers Section of the telephone book.
869	Y	1	Y	1	Y	1	Y	1	N	1	#5. No longer needed. Let's spend the taxpayer's money on the schools or libraries.
870	Y	1	Y	1	Y	1	Y	1	Y	1	#I think periodic focused advertising of this issue would be helpful to new residents.
871	Y	1	Y	1	Y	1	Y	1	Y	1	#5. Periodic survey of areas and police areas to retrieve ordnance exposed due to erosion.
872	Y	1	Y	1	Y	1	Y	1	Y	1	#5 Children and people in the area need to be informed of the potential danger.
873	Y	1	Y	1	Y	1	N	1	Y	1	I would urge continued searches for ordnance on a periodic basis. As you know previously searched areas have had ordnance uncovered at a later date possibly due to storms or material erosion of our soil. It is too early to declare this project finished.
874			Y	1	Y	1	Y	1	Y	1	#1. Not until after the explosives killed the boys. #5. Continual reminder (public service type) 3 to 4 times a year.
875	Y	1	Y	1	Y	1	Y	1	Y	1	When we purchased here in 1973, we had to sign a statement acknowledging that we were aware of the presence of a junk yard and the proximity of the south boundary of Miromax Naval Air Station. I think it was called a negative impact statement. Why not such a statement listing the history and the warning of possible ordnance too signed by all renters and home buyers moving into Tierrasanta? To be filed with escrow papers or held with the owners copy of a rented agreement. These new residents to the area would be informed of the situation in a standard manner.

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876	Y	1	Y	1	Y	1	Y	1	#5. Annual education and awareness programs in community schools.
877	Y	1	Y	1	Y	1	Y	1	#5. On-going spot checks especially after heavy rainfall.
878	Y	1	Y	1	N	1	Y	1	N 1 #5. Local papers
879	Y	1	Y	1	Y	1	N	1	Y 1 #5. Educational awareness in elementary and pre-school programs.
880	Y	1	Y	1	Y	1	N	1	Y 1 Use more signs and place a conspicuous ad in each issue of Tierra Times. Newcomers to our neighborhood are not necessarily aware of the ordnance problems we have had in the past.
881	Y	1	Y	1	Y	1	Y	1	Y 1 Occasional sweeps of the most potentially dangerous canyons in every 3-5- years to allow for erosion.
882	Y	1	Y	1	Y	1	N	1	Y 1 #5. Continued programs to educate school children grades k-12 on what they look like and what to do if they come across any suspicious looking things.
883	Y	1	Y	1	Y	1	N	1	Y 1 #5. Ensure schools continue awareness education. Need better awareness of who to call if found.
884	Y	1	Y	1	Y	1	Y	1	Y 1 #5. Sweeps need to be made periodically perhaps every 5 years so that new uncovered ordnance can be found and removed before another accident occurs.
885	Y	1	Y	1	N	1	N	1	Y 1 #5. Education through the schools - posted notices in the community.
886	Y	1	Y	1	Y	1	Y	1	Y 1 #5. Due to erosion there may be something else to appear.
887	Y	1	Y	1	Y	1	Y	1	Y 1 #5. New families moving into area often do not know of past dangers and the current situation.
888	Y	1	Y	1	Y	1	N	1	Y 1 Just flyers sent out about whom to call if you encounter ordnance maybe once a year!
889	Y	1	Y	1	Y	1	N	1	Y 1 #5. Children have a very short memory, so frequent updating would help protect them.
890	Y	1	Y	1	Y	1	Y	1	Y 1 Maybe a 5 year inspection.
891	Y	1	Y	1	Y	1	Y	1	Y 1 #5. Notice/discussions at schools
892	Y	1	Y	1	Y	1	N	1	Y 1 #2. Why are signs still posted stating the area has not be swept?
893	Y	1	Y	1	Y	1	Y	1	Y 1 #5. I am aware of all the above because I have lived here during the 87-94 cleanup but I am not sure what programs education are in place for newcomers.
894	Y	1	Y	1	Y	1	Y	1	Y 1 #5. People who moved into Tierresanta in general have no awareness of the problem if they have moved here since the last sweep.
895	Y	1	Y	1	Y	1	Y	1	Y 1 #5. I say yes for only one reason: Many people from out of town are unaware of this areas history. I've lived here practically all of my life and have always been aware of Tierresanta history. I would think that regular seasonal reminders on TV news, radio and newspapers when kids are more likely to go exploring in the areas canyons would be enough at this time.
896	Y	1	Y	1	Y	1	Y	1	Y 1 #5. Update in community paper once a year. Visit local schools once a year.

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897	Y	1	Y	1	Y	1	N	1	Y	1	#5. Annual mailings to assure new families are aware of possible dangers.
898	Y	1	Y	1	Y	1	Y	1	Y	1	#5. Not for info but safety the Gov needs to do sample sweeps every 7 to 10 yrs to insure ordnance is not rising to surface.
899	Y	1	Y	1	Y	1	Y	1	Y	1	#3. Thank you! #5. Have you tried bringing programs and info into the schools?
900	Y	1	Y	1	Y	1	Y	1	N	1	#5. Only to new move-ins (families) new residences. I have lived here for 10 years!
901	Y	1	N	1	Y	1	N	1	Y	1	#5. Make phone numbers more obvious.
902	Y	1	Y	1	Y	1	N	1	Y	1	I feel education is the most important protective measure that could be effective in our community talking with children every year in school as erosion and relocation of families continue.
903	Y	1	Y	1	Y	1	Y	1	N	1	#5. No matter what efforts are taken 100% success won't be possible. There are obtuse and stupid people out there no manner of communication can overcome their desire not to listen to authority warnings and communiques.
904	Y	1	Y	1	Y	1	Y	1	Y	1	#5. Current messages are more of a reminder in nature.
905	Y	1	Y	1	Y	1	Y	1	Y	1	#5 As a new resident moves into the area they must be made aware of the potential danger.
906	Y	1	Y	1	Y	1	N	1	Y	1	#5. Conduct ordnance investigations and cleanups periodically 3 - 5 yrs but certainly after a heavy rainfall season.
907	Y	1	Y	1	Y	1	N	1	Y	1	People buying homes in Tierresanta should be given some literature relating to the work being done or have been done in the area so they will be aware of the danger.
908	Y	1	Y	1	N	1	Y	1	Y	1	#5. Always need information for new people moving to the area!!
909	N	1	N	1	N	1	Y	1	Y	1	#5 Signs posted around neighborhood or at entrance to housing area.
910	Y	1	Y	1	Y	1	Y	1	Y	1	#5. I think added measures need to be continued regularly due to erosion possibly revealing more ordnance.
911	Y	1	Y	1	Y	1	N	1	Y	1	#5 New families move to Tierresanta all the time. The local schools need to tell children and families every year about what to do if encountering suspicious material.
912	Y	1	Y	1	Y	1	Y	1			#5. All new owners or renters should be made aware of these facts as part of sales or lease of property.
913	Y	1	Y	1	Y	1	N	1	Y	1	#5. Periodic reminders primarily for many new residents.
914	Y	1	Y	1	Y	1	N	1	Y	1	#5. Occasional reminders in the Tierra Times so new people tell their children.
915	Y	1	Y	1	Y	1	Y	1	Y	1	#5. For the sake of our children and the whole community I would like to see the present warning signs to be changed for new ones stating that the area is safe from shells.

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916	Y	1	Y	1	Y	1	Y	1	Y	1	Continue to make the community aware of the possible danger. New residence are continually moving into the area. When I moved here I received a welcome packet. Perhaps a flyer could be incorporated into such a packet if it isn't already done.
917	N	1	N	1	Y	1	Y	1	Y	1	#5. Provide education to school age children and new families to the area.
918	Y	1			Y	1	Y	1	N	1	#2. I don't know those specific dates, but I do know there was a cleanup after 2 boys were killed. #5. Keep the school programs going.
919	Y	1	Y	1	Y	1	Y	1	Y	1	#5. Education programs at local schools.
920	Y	1	Y	1	Y	1	Y	1	N	1	
921	Y	1	Y	1	Y	1	Y	1	Y	1	#5. Continue education in the schools in this area.
922	N	1	N	1	N	1	N	1	Y	1	#5. People moving into the area should be given notice of this and education.
923	Y	1	N	1	Y	1	N	1	Y	1	#5. A letter mailed including steps to take in case of an ordnance finding and whom to call.
924	Y	1	Y	1	Y	1	N	1	Y	1	#5. Regularly publish in Tierra Times newspaper phone numbers and updates. Mailers to homeowners.
925	Y	1			Y	1	Y	1	Y	1	#5. Presentations at all local schools Ref: safety for children. Scheduled sweeps after seasonal rainfall. Continued community awareness presentations for adults.
926	Y	1	Y	1	Y	1	N	1	Y	1	I think there should be more notices distributed annually to remind newer residents of the possibility of finding ordnance. I take my dog in a lot of canyons and have never seen any yet but some must be around that will surface after heavy rains.
927	Y	1	Y	1	Y	1	N	1	Y	1	#5 If not already done make sure each child in local schools beginning in grade school knows this and see to it that all homeowners receive info as part of home closing. Sign papers confirming they read & understand the issue.
928	Y	1	Y	1	Y	1	N	1	Y	1	#5. Periodic written reminders and signs are sufficient.
929	Y	1	Y	1	Y	1	Y	1	Y	1	A booth at some of the community's gatherings October-fest and at a store front occasionally.
930	Y	1	Y	1	Y	1	N	1	Y	1	#5. I think that the US Army Corp must continue to monitor and sweep the area. This ought to be an ongoing priority.
931	Y	1	Y	1	N	1	N	1	Y	1	#4. I'd check Tierra Times because they have it listed. #5. Periodic checks.
932	Y	1	Y	1	Y	1	Y	1	Y	1	#5. Signs with pictures of ordnance for people to identify pieces easily.
933	Y	1	Y	1	Y	1	Y	1			#5 Only if the US Army Corps is not positive Tierresanta is free of ordnance.

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934	Y	1	Y	1	Y	1	Y	1	N	1	#5. Just do another more thorough search/sweep of the area. I have personally spoken to an engineer who was contracted to sweep Tierresana. He told me that there was no way to assure that all the ordnance were removed. He also assured me that there were more ordnance that could be removed with more effort/attempts.
935	Y	1	Y	1	Y	1	N	1	Y	1	#5. Periodic searches should be conducted.
936	Y	1	Y	1	Y	1	Y	1	N	1	#5. Why not stop leaving it around the planet.
937	Y	1	Y	1	Y	1	Y	1	Y	1	#5. Due to erosion, I feel that further sweeps are necessary.
938	Y	1	Y	1	Y	1	Y	1	Y	1	#5. Remind school children of this brochures assembly program.
939	N	1	Y	1	Y	1	N	1	N	1	#5. Cleanup was completed.
940	Y	1	Y	1	Y	1	N	1	Y	1	#5. Continous education of the homeowners
941	Y	1	Y	1	Y	1	Y	1			#5. I have lived here since 1972. I understand and teach my children of the ordnance realities. Many military people come and go in this area. Perhaps permanent street signs or the like are still needed.
942	Y	1	Y	1	Y	1	Y	1	Y	1	#5. Continuation of the same for newcomers.
943	Y	1	N	1	Y	1	N	1	Y	1	#5 Perhaps name and phone on the signs posted around TS of who to call if something suspicious is found would be helpful.
944	Y	1	Y	1	N	1	N	1	Y	1	#5. Educational seminar at the schools w/info sent home for parents. Signs at canyon entrances etc.
945	Y	1	N	1	N	1	Y	1	Y	1	#5. More ordnance investigation.
946	Y	1	N	1	N	1	Y	1	Y	1	#5. Maybe a newsletter.
947	N	1	N	1	N	1	N	1	Y	1	#4. The police? #5. Regular articles in Tierresanta newspapers or even S.D. Union.
948	N	1			N	1	N	1	Y	1	#5. Let the residents know what is going on and what is a danger to them.
949	Y	1	Y	1	N	1	Y	1	Y	1	#5. Continued education; exam of site frequently.
950	Y	1	Y	1	Y	1	Y	1	Y	1	#5. Alert new residents.
951			Y	1	Y	1	Y	1	N	1	#5. This is a local problem now. It should be handled by the local gov. DOD should be contacted by the local gov if needed.
952	Y	1	Y	1	Y	1	Y	1	Y	1	#5. Continue the process of educating young children and new people in the community.
953	Y	1	Y	1	Y	1	N	1	Y	1	#5. Continued messages/communications should be procedural. There are many many new people moving in and out of Tierresanta all the time!
954	Y	1	N	1	Y	1	N	1	Y	1	#5. Programs should be given every year to grade school children in the area to educate them on what old ordnance looks like and what to do when finding it.
955	Y	1	Y	1	Y	1	Y	1			#5 Continue #3 above.
956	Y	1	N	1	Y	1	N	1	Y	1	#5. At a community event have a display table with a person answering questions. Have some props to show and tell.
957	Y	1	Y	1	Y	1	Y	1	Y	1	#5. Continue education on ordnances in school and public events.



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958	Y	1	Y	1	Y	1	N	1	N	1	#5. What we need is NOT more warning signs. We need for the Army to come back and clean up the mess... completely! Leave this area just as totally free of ordnance as it was before you came and polluted it!
959	Y	1	Y	1	Y	1	Y	1	Y	1	#5. Continued presentations to schools in the area.
960	Y	1	Y	1	N	1	Y	1	Y	1	#5. More threat signs
961	Y	1	Y	1	Y	1	Y	1	N	1	#5. Signage is adequate. Keep notices in local newspaper
962	Y	1	Y	1	Y	1	Y	1	Y	1	#5. More signs periodic sweeping and clean-up.
963	Y	1	Y	1	Y	1	Y	1	N	1	#5. Well I feel horrible about the children who died years ago, the facts have been forgotten that the boys continually pounded the ordnances with the rocks etc until they exploded. They did not just look at the ordnance, pick it up and it exploded. It took a long time and a lot of effort to make it explode. Somebody please remember that enough taxpayers money have been spent also the Gov cannot and should not be a guarantee of safety for everyone in spite of themselves. People should take some responsibility for their own actions. Reminds me of the people who built houses in Pt. Loma then complained about the airport noise even though the airport was there first; they are still complaining and so are the people in Tierresanta who expect others to watch out for their children.
964	Y	1	Y	1	Y	1	Y	1	Y	1	#5 Ongoing information of the ordnance situations because of new residents to the area. Assemblies for area schools yearly as well as reminders in Tierra Times.
965	Y	1	Y	1	Y	1	Y	1	Y	1	#5. People new to the area may not be aware.
966	Y	1	Y	1	Y	1	Y	1	N	1	#5. I think the Army has done a very good job on this problem and has been responsive when real situations arise. Thanks
967	Y	1	Y	1	Y	1	Y	1	Y	1	#5. Classes on problem in the local grade schools.
968	Y	1	Y	1	Y	1	N	1	Y	1	#5. Talk in the schools 3-6 grades
969	Y	1	Y	1	Y	1	Y	1	Y	1	Continue to educate children in the schools. The adults are very aware of the situation. Instructing us how to fold a letter was unnecessary and a waste of a print run.
970	Y	1	Y	1	Y	1	Y	1	Y	1	#5. Constant education of it in schools and notices every so often in mail.
971	Y	1	Y	1	Y	1	Y	1	Y	1	#5. Continue instructions to all schools.
972	Y	1	Y	1	Y	1	N	1	Y	1	#4. I could find out quickly. #5. Maintain the signs replace around them.
973	Y	1	Y	1	Y	1	Y	1	Y	1	#5. Additional measures in respect to new residents as they move to Tierresanta to insure they are aware.
974	Y	1	Y	1	Y	1	Y	1	Y	1	#2. But do not consider it sufficient. #3. But most have been removed because residents say it de-values their property value. #5. Additional sweeps have to be done periodically.
975	Y	1	Y	1	Y	1	N	1	Y	1	#5. Via Tierresanta Times

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976	Y	1	Y	1	Y	1	Y	1	Y	1	#5. Continued education of community members and new arrivals and continued data maintenance concerning ordinances found and appropriate action taken when decided necessary.
977	Y	1	Y	1	Y	1	Y	1			#1. Very aware #2. Parents should keep kids out of canyons. #4. But we don't travel canyons. #5. They do all they need to specific parents. Homeowners need to address this issue to the nasty children of theirs. I believe gov does all it can, lousy permissive parents should get fined heavy fines because they let their kids run wild --ugh!
978	Y	1	Y	1	N	1	N	1	Y	1	#5. New neighbors in T.S. M.C. will be unaware of the above and those of us who are aware may not think of giving them the history of the area.
979	Y	1	Y	1	N	1	N	1	Y	1	#5. Possibly put phone # and important information on a refridgerator magnet.
980	N	1	N	1	N	1	N	1	Y	1	#5 Maybe have a info sheet in the move-in packet for the military housing area.
981	Y	1	Y	1	Y	1	N	1	N	1	#4 I would have to get info from warning signs.
982	Y	1	Y	1	Y	1	N	1			#5 I don't know.
983	Y	1	Y	1	Y	1	Y	1			#5 ?
984	Y	1	Y	1	Y	1	Y	1	Y	1	
985	Y	1	Y	1	N	1	Y	1	Y	1	#5 Publish address of Internet Website in PORTOFINO press Tierra Times pointing to basic info on sweeps plus final and follow-up reports.
986	Y	1	Y	1	Y	1	N	1	Y	1	
987	Y	1	Y	1	N	1	N	1	N	1	
988	Y	1	Y	1	Y	1	Y	1	Y	1	#5 Probably put up more signs.
989	Y	1	Y	1	Y	1	Y	1	Y	1	
990	Y	1	Y	1	Y	1	Y	1	N	1	
991	Y	1	Y	1	Y	1	Y	1	N	1	
992	Y	1	Y	1	Y	1	Y	1	N	1	
993	Y	1	Y	1	Y	1	N	1	Y	1	#5 Brochures indicating hazards.
994	Y	1	Y	1	Y	1	Y	1	N	1	
995	Y	1	Y	1	Y	1	Y	1	N	1	
996	Y	1	Y	1	Y	1	Y	1	Y	1	#5 Put up more signs and replace damaged or missing signs. Also annual reminders in the local Tierra Times newspaper and send mailings to homes and new members of the community. Schools should also have yearly classes on the subject.
997	Y	1	Y	1	Y	1					#4 ? Fire Dept. #5 Do a school program for children, if it is not already being done.
998	Y	1	Y	1	Y	1	N	1	N	1	#2 I feel they did a good job. #4 I thought this was published in the Tierra Times, local newspaper. I checked and it was not listed.

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999	Y	1	Y	1	Y	1	N	1	N	1	#4 (But if it is listed in the Community newspaper I could find it.) Actually, I'd go look at one of the signs. #5 If anything, as time passes, community awareness will diminish. Anything that would cause an occasional reminder would be much appreciated (article in community paper, large sign at popular site: ball fields, rec. center, churches, grocery marts, etc.) Are spot checks planned to double-check that all former ordnance has been removed?
1000	Y	1	Y	1	Y	1	N	1	Y	1	More training for children and their safety.
1001	Y	1	Y	1	Y	1	Y	1	N	1	
1002	Y	1	Y	1	Y	1	Y	1	N	1	
1003	Y	1	Y	1	Y	1	N	1	Y	1	#5 We need to be reminded again, maybe in the Tierra Times and in school.
1004	Y	1	Y	1	Y	1	Y	1	N	1	
1005	Y	1	Y	1	Y	1	N	1	Y	1	#5 Better children's warnings -- The problem there is now is that children are more attracted to the objects than they are of the warning!
1006	N	1	Y	1	Y	1	Y	1	Y	1	By 2010 another sweep should be made to determine whether or not significant amounts of munitions have been revealed by erosion.
1007	Y	1	Y	1	Y	1	Y	1			#5 People need to be reminded periodically. Population moves and changes.
1008	Y	1	Y	1	Y	1			N	1	#4 Not sure - "911" probably
1009	Y	1	Y	1	Y	1	N	1	N	1	
1010	Y	1	Y	1	Y	1	Y	1	N	1	
1011	N	1	N	1	Y	1	N	1	Y	1	Why is this not mentioned before moving in?
1012	Y	1	Y	1	Y	1	Y	1	N	1	
1013	Y	1	Y	1	Y	1	N	1	Y	1	#1 I did not know when I purchased my home in 1976. #4 I could look it up. #5 New people to the area need to be aware of the situation and what has been done in the past.
1014	Y	1	Y	1	Y	1	Y	1	N	1	
1015	Y	1	Y	1	Y	1	Y	1	Y	1	#4 S.D.P.D. Bomb Squad #5 Mailed notices to new residents are valid.
1016	Y	1	Y	1	Y	1	Y	1	Y	1	#5 Yearly reminders at school (if not already done).
1017	Y	1	Y	1	Y	1	Y	1	N	1	
1018	Y	1	Y	1	Y	1	N	1	Y	1	#2. Alleged to have.
1019	Y	1	N	1	Y	1	N	1	N	1	
1020	Y	1	Y	1	Y	1	Y	1	N	1	#5 However, I do not live on a canyon and people newly moving to neighborhood may be unaware of past history.
1021	Y	1	Y	1	Y	1	Y	1	N	1	
1022	Y	1	Y	1	Y	1	Y	1	Y	1	
1023	Y	1	Y	1	Y	1	Y	1	N	1	
1024	Y	1	Y	1	Y	1	N	1	N	1	
1025	Y	1	Y	1	N	1	N	1			
1026	Y	1	N	1	N	1	N	1	Y	1	Use metal detectors to ensure that no ordnance still exists in that area.
1027	N	1	N	1	N	1	N	1	N	1	
1028	Y	1	Y	1	Y	1	Y	1	N	1	

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1029	N	1	N	1	N	1	Y	1	N	1	
1030	Y	1	Y	1	Y	1	Y	1	N	1	
1031	Y	1	Y	1	Y	1	Y	1	N	1	
1032	N	1	N	1	N	1	N	1	Y	1	Much in the way we sign an asbestos notification form when we move in, it would be appropriate to have the same type of thing for this.
1033	Y	1	Y	1	Y	1	Y	1	N	1	

FINAL

## **APPENDIX E**

Protectiveness Assessment

## Protectiveness

Many concepts have little or no identity by themselves. Frequently they exist in couplets. Our understanding of one element of this couplet depends on our understanding of the other. For example, cold can only be explained by the absence of heat. Drama has tragedy and comedy. “Protectiveness” and “Potential for Harm” are complementary characteristics of an ordnance-contaminated site. Protectiveness is achieved when the potential for harm is reduced or managed. Protectiveness is maximized when potential for harm is minimized.

A site contaminated with ordnance has three major factors that create the potential for harm including the ordnance, the site, and the people that use the site. Each major factor has three components, which will be explained below. Each component can be used as measure of the seriousness of the problem or as a way to measure the benefits of an action.

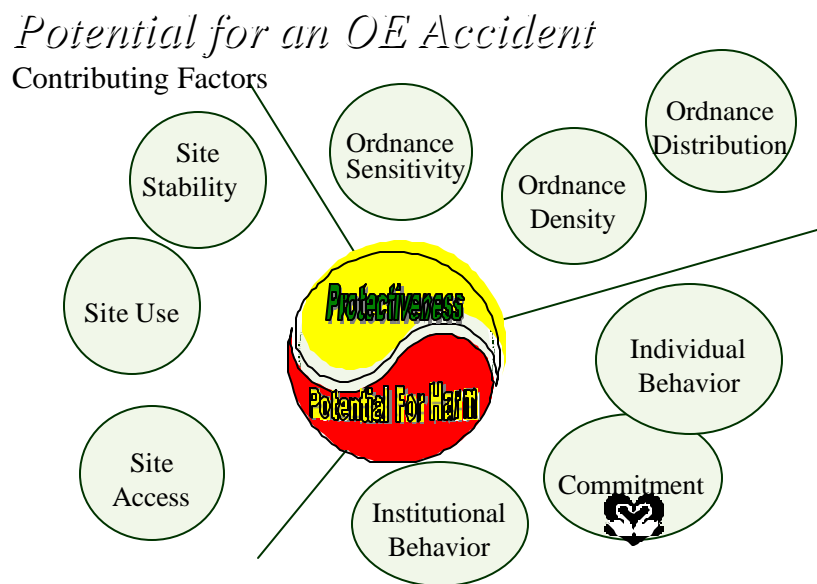


Fig. 1

## The ordnance

### Density

The density of ordnance is an estimate of how many items exist per acre. A reduction of this sub-factor can be used as a direct measure of benefit for a project.

### Distribution

The distribution of ordnance is an estimate of where the highest concentrations exist. This may be a benefit if the response action leaves a safer condition than before the project is done. Removal of all ordnance above one foot below the ground surface, may be protective for surface use of the site.

### Sensitivity

Some ordnance is more sensitive (easier to accidentally detonate) than others. This characteristic is useful to describe the seriousness of the problems caused by ordnance contamination. There is little potential for improvement of this factor.

## The site

### Site Access

Site access is a measure of how easy it is to go to the site and use it for personal or group activities. This factor may indicate a direct improvement if a reduction in site access is compatible with the local needs. It also may just be an indicator the seriousness of the problems caused by ordnance contamination like the Sensitivity of ordnance above.



### Site Use

Site use is an indication of how the site use may be dangerous. A modification of site use may be very protective if it is compatible with the local needs.

### Site Stability

Erosion or other dynamic forces may expose ordnance that would otherwise be totally inaccessible. This factor may indicate a direct benefit to the community in the form of potential exposures eliminated. A more stable site is safer than a site prone to erosion. Other factors might include: frost heave, littoral processes (coastal forces), or human modifications to the existing condition ( i.e. tillage techniques, capping or land-use modifications)

## **People**

There are too many aspects to cover this area in detail. Only a few examples are offered for explanation of this broad concept.

### Individual Behavior

If people would be willing to use the site in accordance with safety plans, avoid risky behaviors and respond to found ordnance in accordance with contingency plans nearly all of the potential for harm would be eliminated. The availability of information, proactive planning and cooperation are key indicators of benefits.

### Institutional Behavior

Institutions such as Building Departments, zoning boards etc are the best choice for disseminating vital information and to possibly require compliance (enforcement) with safety and contingency plans is key. Other agencies may be able to discourage reckless development plans if knowledge of the contamination is available to those agencies.

### Commitment

The ability of individuals, local agencies, state and local regulators, along with the Army Corps of Engineers to commit to maximizing the protectiveness of the continuing ordnance response. A commitment to work together is far more protective than unilateral action by any single group.

Looking at all of these factors we can assess the relative protectiveness of a response plan at any specific ordnance contaminated site. We can also detect deterioration or improvement over time. Individually, these factors will not give an accurate assessment of protectiveness. Considered together they paint a picture that can be the basis for corrective action, proactive planning to avoid future harm or to serve as documentation that all is well.

### Case Study - Tierrasanta

In the specific case of Tierrasanta, the project is still protective. The figure 2 (following page) indicates the assessment of protectiveness carried out for the 1904 acre clearance and local actions to support the residential development in the Former Camp Elliot impact area.

### Summary

Site conditions have improved. The vegetation has made some places in the canyons virtually inaccessible to humans and created a natural barrier to erosion. The Corps of Engineers has matured in our ability to communicate the important issues and the communities have responded for the benefit of the stakeholders.

The state is participating at a much more intense level than they did in the original effort. Specific deficiencies are being addressed.

# Measuring Protectiveness

Ordnance			Site			People		
Sensitivity	Density	Distribution	Use	Access	Stability	Individual	Agency	Commitment
Before Response(1989)								
EC	EC	EC	EC	EC	EC	EC	EC	EC
After Response (1994)								
Recurring Review (1999)								

EC = Existing Condition



Figures assigned by comparison to previous 5 year interval

Fig 2

## **APPENDIX F**

### Photo Erosion Log

**PHOTO EROSION LOG – ADDITIVE**

**FOR**

**TIERRASANTA  
LONG TERM MONITORING (LTM)  
REPORT**



**US Army Corps  
of Engineers®**

**Prepared by  
David Horvath & Tommy Hunt  
CEHNC-ED-CS-D**

**29 September 1999**

**Long Term Monitoring Report – Additive  
For  
Tierrasanta, California and the Murphy Canyon Naval Housing**

This document is created for the purpose of tracking physical changes to the many ravines and canyons associated with the Tierrasanta and Murphy Canyon Naval Housing Area, in San Diego, CA. All digital pictures associated with this report were recorded during a site visit conducted 13 – 17 September 1999. Point positions recorded in Table 1 (Appendix A) were recorded with a handheld Magellan GPS 2000 XL (general precision error of 20 to 50 feet). The magnetic compass bearing is used for direction aim to picture center.



Picture 1 – Area F-8E @ 230 degrees



Picture 2 – Area F-8 @ 25 degrees





Picture 3 – Area F-2W @ 205 degrees



Picture 4 – Area F-2W @ 285 degrees





Picture 5 – Area F-2M @ 130 degrees



Picture 6 – Area F-3 @ 230 degrees





Picture 7 – Area F-3 @ 310 degrees



Picture 8 – Area F-3 @ 10 degrees





Picture 9 – Area F-1 @ 180 degrees



Picture 10 – Area F-2W @ 0 degrees





Picture 11 – Area F-1 @ 180 degrees



Picture 12 – 1-15 at Tierrasanta – Area OA-4



Picture 13 – Areas F-1, F-11N & OA-1 @ 330 degrees  
(Picture taken 300 feet east of Chapel of Light Church on Santor Road)



Picture 14 – Area F-1 @ 10 degrees





Picture 15 – Area F-11N @ 60 degrees



Picture 16 – Area OA-1 @ 85 degrees





Picture 17 – Area OA-1 (Fenced area next to Chapel of Light. Endangered Species Habitat – San Diego Fairy Shrimp)



Picture 18 – Area D @ 350 degrees (Driving Range at Navy Golf Course. Chapel of Light located in trees at left third of picture)



Picture 19 – Area D @ 210 degrees (Driving Range)



Picture 20 – Area C-3 @ 190 degrees





Picture 21 – Area C-3 @ 250 degrees



Picture 22 – Area C-1 @ 15 degrees



Picture 23 – Area C-3 @ 225 degrees



Picture 24 – Area F-10N @ 205 degrees





Picture 25 – Area F-2E @ 245 degrees



Picture 26 – Area E-2 @ 145 degrees



Picture 27 – Area E-1 @ 90 degrees



Picture 28 – Area E-2CB @ 100 degrees





Picture 29 – Park @ 45 degrees



Picture 30 – Park (Slope of Park) @ 15 degrees



Picture 31 – Area F-10A @ 330 degrees



Picture 32 – Park @ 100 degrees





Picture 33 – Park @ 55 degrees



Picture 34 – Area F-2E @ 105 degrees





Picture 35 – Area F-2M @ 290 degrees



Picture 36 – Area E-2 @ 0 degrees



Picture 37 – Area E-2CB @ 60 degrees



Picture 38 – Area E-2 @ 140 degrees





Picture 39 – Area F-55 @ 110 degrees



Picture 40 – Area F-5N @ 20 degrees





Picture 41 – Area F-10E @ 154 degrees (3 foot cut)



Picture 42 – Area F-10E @ 100 degrees





Picture 43 – Area F-10E @ 125 degrees



Picture 44 – Area F-7 @ 360 degrees





Picture 45 – Area F-7 @ 160 degrees



Picture 46 – Area F-7 @ 188 degrees





Picture 47 – Area F-7 @ 212 degrees



Picture 48 – Area F-6 @ 195 degrees





Picture 49 – Area F-1 @ 125 degrees



Picture 50 – Area F-1 @ 90 degrees



f



Picture 51 – Area F-1 @ 20 degrees



Picture 52 – Area F-1 @ 70 degrees





Picture 53 – Area F-1 @ 65 degrees



Picture 54 – Area F-1 @ 85 degrees





Picture 55 – Area F-1 @ 269 degrees (Opposite Bank – Looking at erosion of bank at Murphy Canyon Youth Center)



Picture 56 – Area F-5N @ 270 degrees





Picture 57 – Area F-5N @ 310 degrees



Picture 58 – Area F-5N @ 285 degrees





Picture 59 – Area F-5N @ 298 degrees



Picture 60 – Area F-2W @ 28 degrees





Picture 61 – Area F-1 @ 60 degrees



Picture 62 – Area F-1 @ 20 degrees





Picture 63 – Area F-1 @ 325 degrees



Picture 64 – Area F-5N @ 58 degrees





Picture 65 – Area F-5N @ 142 degrees



Picture 66 – Area F-5N @ 182 degrees



Picture 67 – Area F-7 @ 70 degrees



Picture 68 – Area F-7 @ 245 degrees





Picture 69 – Area F-7 @ 225 degrees



Picture 70 – Area F-10E @ 55 degrees





Picture 71 – Area F-10E @ 125 degrees



Picture 72 – Area F-10N @ 30 degrees





Picture 73 – Area F-10M @ 45 degrees



Picture 74 – Area F-10E @ 310 degrees



Picture 75 – Area C-5 @ 190 degrees



Picture 76 – Area C-5 @ 0 degrees





Picture 77 – Area C-4@ 200 degrees



Picture 78 – Area C-4 @ 30 degrees



Picture 79 – Area C-4 @ 40 degrees



Picture 80 – Area F-6 @ 240 degrees





Picture 81 – Area F-6 @ 225 degrees

**APPENDIX 'A.-Picture Centroid and Directional Bearing Table**

		TIERRASANTA / CAMP ELLIOT		
PICTURE NUB.	BEARING	LATITUDE	LONGITUDE	AREA
1	230	32 49' 95" N	117 06' 78" W	F-8E
2	25	32 49' 98" N	117 06' 77" W	F-8
3	205	32 49' 78" N	117 05' 25" W	F-2W
4	285	32 49' 52" N	117 04' 94" W	F-2W
5	130	32 49' 53" N	117 04' 93" W	F-2M
6	230	32 49' 34" N	117 05' 07" W	F-3
7	310	32 49' 08" N	117 05' 47" W	F-3
8	10	32 49' 08" N	117 05' 47" W	F-3
9	180	32 49' 11" N	117 05' 74" W	F-1
10	0	32 49' 09" N	117 05' 66" W	F-2W
11	180	32 49' 09" N	117 06' 07" W	F-1
12	90	Tierrasanta & I 15		OA-4
13	330	32 49' 19" N	117 06' 17" W	OA-1
14	10	32 49' 19" N	117 06' 17" W	F-1
15	60	32 49' 19" N	117 06' 17" W	F-11N
16	85	32 49' 19" N	117 06' 16" W	OA-1
17	100	32 49' 19" N	117 06' 16" W	OA-1
18	350	32 48' 12" N	117 06' 06" W	D
19	210	32 48' 12" N	117 06' 06" W	D
20	190	32 50' 45" N	117 05' 09 W	C-3
21	250	32 50' 45" N	117 05' 09 W	C-3
22	15	32 50' 45" N	117 05' 39" W	C-1
23	225	32 50' 45" N	117 05' 39" W	C-3
24	205	32 50' 26" N	117 05' 68" W	F-10N
25	245	32 49' 48" N	117 04' 59" W	F-2E
26	145	32 49' 48" N	117 04' 59" W	E-2
27	90	32 49' 48" N	117 04' 59" W	E-1
28	100	32 49' 48" N	117 04' 59" W	E-2CB
29	45	32 49' 48" N	117 04' 59" W	PARK
30	15	32 49' 49" N	117 04' 57" W	PARK
31	330	32 49' 53" N	117 04' 53" W	F-10A
32	100	32 49' 50" N	117 04' 62" W	PARK
33	55	32 49' 50" N	117 04' 62" W	PARK
34	105	32 49' 46" N	117 04' 76" W	F-2E
35	290	32 49' 46" N	117 04' 77" W	F-2M
36	0	32 49' 24" N	117 04' 62" W	E-2
37	60	32 49' 24" N	117 04' 62" W	E-2CB
38	140	32 49' 24" N	117 04' 62" W	E-2
39	110	32 48' 70" N	117 04' 98" W	F-5S
40	20	32 48' 95" N	117 05' 21" W	F-5N

41	154	32 49' 92" N	117 06' 11" W	F-10E
42	100	32 49' 92" N	117 06' 11" W	F-10E
43	125	32 49' 93" N	117 05' 92" W	F-10E
44	360	32 49' 92" N	117 06' 32" W	F-7
45	160	32 49' 86" N	117 06' 40" W	F-7
46	188	32 49' 86" N	117 06' 40" W	F-7
47	212	32 49' 86" N	117 06' 40" W	F-7
48	195	32 49' 75" N	117 06' 30" W	F-6
49	125	32 49' 19" N	117 06' 21" W	F-1
50	90	32 49' 19" N	117 06' 21" W	F-1
51	20	32 49' 19" N	117 06' 21" W	F-1
52	70	32 49' 19" N	117 06' 21" W	F-1
53	65	32 49' 19" N	117 06' 21" W	F-1
54	85	32 49' 19" N	117 06' 21" W	F-1
55	269	32 49' 17" N	117 06' 15" W	F-1
56	270	32 48' 99" N	117 06' 20" W	F-5N
57	310	32 49' 06" N	117 05' 18" W	F-5N
58	285	32 49' 09" N	117 05' 18" W	F-5N
59	300	32 49' 08" N	117 05' 19" W	F-5N
60	30	32 49' 22" N	117 05' 71" W	F-2W
61	60	32 49' 08" N	117 06' 21" W	F-1
62	20	32 49' 08" N	117 06' 21" W	F-1
63	325	32 49' 08" N	117 06' 21" W	F-1
64	60	32 49' 32" N	117 05' 06" W	F-5N
65	140	32 49' 31" N	117 04' 79" W	F-5N
66	180	32 49' 31" N	117 04' 79" W	F-5N
67	70	32 49' 83" N	117 06' 36" W	F-7
68	245	32 49' 88" N	117 06' 15" W	F-7
69	255	32 49' 93" N	117 06' 13" W	F-7
70	55	32 49' 91" N	117 06' 13" W	F-10E
71	125	32 49' 97" N	117 05' 97" W	F-10E
72	30	32 50' 02" N	117 05' 99" W	F-10N
73	45	32 49' 75" N	117 04' 97" W	F-10M
74	310	32 49' 80" N	117 05' 00" W	F-10E
75	190	32 50' 05" N	117 05' 00" W	C-5
76	0	32 50' 06" N	117 05' 05" W	C-5
77	200	32 50' 22" N	117 05' 05" W	C-4
78	30	32 50' 22" N	117 05' 05" W	C-4
79	40	32 50' 26" N	117 04' 96" W	C-4
80	240	32 49' 77" N	117 06' 24" W	F-6
81	225	32 49' 83" N	117 06' 37" W	F-6
82				
83				